VOL. IV. JUNE, 1898. NO. 6.

THE LARYNGOSCOPE

A MONTHLY JOURNAL DEVOTED TO DISEASES OF THE NOSE - THROAT - EAR

FOR CONTENTS SEE NEXT PAGE.

SUBSCRIPTION, $2.00 PER ANNUM, IN ADVANCE.

P. O. BOX 787. ST. LOUIS, MO

OFFICE OF PUBLICATION, 3702 OLIVE STREET.
FOREIGN OFFICE: JOHN WRIGHT & CO., BRISTOL, ENG.

[Entered at the Post Office at St. Louis, Mo., as Second-Class Matter, in July, 1896.]

Official Organ American Laryngological, Rhinological and Otological Society, Southern Section.

Official Organ Western Otological, Laryngological and Rhinological Association.

Official Organ New York Academy of Medicine, Laryngological Section.

CONTENTS.

ORIGINAL COMMUNICATIONS.

NEW INSTRUMENTS.

EDITORIAL DEPARTMENT.

EDITORIALS.

SOCIETY PROCEEDINGS.

MISCELLANEOUS.

THE

LARYNGOSCOPE.

VOL. IV. ST. LOUIS, MO., JUNE, 1898. No. 6.

ORIGINAL COMMUNICATIONS.

A CASE OF PHARYNGEAL NYSTAGMUS, WITH REMARKS ON SIMILAR AFFECTIONS OF THE PHARYNX AND LARYNX.

BY H. LAMBERT LACK, M.D., LONDON; F.R.C.S., ENG.

Assistant Physician to the Throat Hospital, Golden Square; Surgeon to the Ear and Throat Department Children's Hospital, Paddington Green, London.

The object of this paper is to draw attention to an interesting and apparently very rare affection, or perhaps one should say symptom, in the hope that other observers who have met with it may record their experience and increase our, at present, very meagre knowledge on the subject. The nature of the affection will be most easily understood by giving brief notes of a case at present under my care.

L. H., female, aged nineteen years, came under observation at the Throat Hospital, complaining of "phlegm sticking at the back of the throat." On examining the pharynx one at once noticed a remarkable rapid twitching of the posterior pharyngeal wall which seemed to be sharply jerked to the left side and then relaxed. The movements were rapid and unceasing, about 150 or more to the minute, and were not quite regular either in extent or time. They curiously resembled nystagmus, which is, I think, the best name to apply to the affection, and were quite different from choreic movements. The affected muscles seemed to be the superior and middle constrictors.

The palatal muscles were not affected, although at times the soft palate seemed to have a slight communicated movement. This condition remained constant for over two months, during which time the patient was under frequent observation and was shown at the Laryngological Society of London. It apparently gave rise to no symptoms and thus its previous duration cannot be determined. Cocainization of the nose and pharynx had no effect on the movements. One nostril being at times sufficiently patent to permit a view of the pharynx through it, the movements could be seen to continue when the mouth was closed. Examination of the larynx showed that the arytenoids and vocal cords were adducted normally and were quite steady on phonation. On quiet inspiration, however, one could see that the arytenoids separated in a jerky fashion and that they approximated again during expiration in two or three jerks. These movements were of slight extent, occurred much less rapidly, and in no way resembled those of the pharyngeal wall. My attention was only drawn to them after reading some of the reported cases. On watching the upper lip one sometimes saw a peculiar, very fine, rapid tremor. This soon ceased when the patient was not watched and reappeared after a few seconds on attention being again directed to it. There was present some post-nasal catarrh with a little dry adherent crusty secretion. The patient seemed to be in robust health, although she said she had suffered from rather severe headaches in the last three months. There was no tremor or spasm of any other muscles than those above described. There was no history, personal or family, of chorea or rheumatism. The patient did not seem hysterical, and although rather nervous on her visits to the hospital, did not appear to be so at other times.

I have had the opportunity of seeing another case, in many respects exactly similar to the above. The patient, a man, aged thirty-three years, was shown at the Laryngological Society of London, by Dr. Bond, who thus described the case: "On examining throat, the back of pharynx was found to move in a rhythmical manner, horizontally to the left and back again, and at the same time the left side of the soft palate was drawn up and then relaxed. The larynx was not affected. Patient could give no history of the malady, as he thought his throat was quite healthy. There was no clicking heard by patient, himself, or by others." The movements of the pharynx in this case, as in mine, irresistibly remind one of nystagmus. Neither of these cases seemed to afford a clue to the pathogenesis of the affection, and I, therefore, consulted the literature of the subject. In a fairly extensive search through the throat literature of the last four-

teen years, I could find but very few cases in any way resembling the above. Some of them were, however, very interesting and suggestive, and I venture to add a brief resumé of them and of the more important papers bearing on the subject.

Spencer has recorded the case of a girl, aged twelve years, suffering from the symptoms of cerebral tumor—intense occipital headache, constipation and vomiting, vertigo, reeling gait and ocular nystagmus. There was a rhythmical spasmodic movement of the superior constrictor at the same rate as the eyes, namely, about 180 a minute. The soft palate and fauces showed only a slight tremor, probably communicated. The arytenoids seemed to twitch in a similar manner and at the same rate as the pharynx. On inspiration the glottis opened in a jerky manner, closed in a similar way, and remained shut, with only a slight tremor, until a fresh breath was drawn.

Scheinman showed at the Berlin Medical Society, a case of left-sided hemiplegia, probably due to a syphilitic lesion. The patient exhibited clonic twitchings of the superior constrictor of the pharynx, of the levators and tensors of the palate and of the adductors of the vocal cords.

Oppenheim reported the case of a patient with a cerebellar tumor in whom there were tremulous movements of the head and upper extremities, with rhythmical twitchings of the pillars of the fauces and of the laryngeal muscles.

The same observer has reported a case of twitching of the pillars of the fauces, of the uvula and of the vocal cords, at the rate of about forty times a minute. The patient had twitchings, also, in the lower facial region, and other serious nervous symptoms, such as severe post-occipital headache, difficulty in swallowing, paralysis of the left facial nerve and of the right leg, etc., all of which followed on a severe attack of cerebro-spinal meningitis two years previously.

Dieulafoy recorded the case of a man in whom the soft palate and uvula were rapidly raised and lowered, producing a slight noise and a peculiar sensation (felt by the patient). There were tremors of the lips and eyes and of the whole face when he spoke, but no other muscles were affected. He suffered from severe nervous depression, bad memory, difficulty in speech, etc., dating the whole trouble two years back, when he had a severe nervous attack characterized by vertigo, periods of unconsciousness, etc.

Legroux showed a similar case, a man, who, for fifteen or sixteen years, had had constant rhythmical bilateral spasm of the palate, "a true nystagmus." He had had syphilis and was suffering from tabetic symptoms which were, however, improving under specific treatment.

Gerhardt has recorded a case in which spasm of the muscles supplied by the right spinal accessory nerve, followed a severe injury, and gave rise to wryneck, etc. The right vocal cord adducted further than the left and moved in a very jerky manner. These jerky movements also occurred in expiration and could be felt by the fingers over the lower part of the thyroid cartilage. The right half of the soft palate was at a higher level than the left and the right half of the uvula was tremulous.

Baginsky has described, under the title "Nystagmus of the Vocal Cords," what he believed to be a unique case. The patient, a woman, aged sixty-one years, had suffered for many years from various forms of severe hysteria. The vocal cords during expiration moved in a jerky manner up to or beyond the cadaveric position. These movements were less marked on hurried respiration and disappeared entirely on phonation. They persisted for over two years.

A few cases of a somewhat different nature have been recorded, under the title "Chorea" of the soft palate. Thus Schadle relates the case of a young girl, apparently in excellent health, whose palate showed "distinct rhythmic choreiform movements," due to constant spasm of the levatores palati. The movements were associated with a clicking noise in the ear, were temporarily arrested by cocainizing the nose and cured by removing hypertrophied inferior turbinates. The term chorea is obviously wrong and misleading, choreic movements being essentially not rhythmical. Almost identical cases have been recorded by Cornelius Williams, Seifert, and Michael, all of them being associated with and presumably due to nasal lesions.

Schultzen, in a very full paper on tremulous movements of the larynx, showed that these may occur in connection with certain severe nervous diseases, as paralysis agitans, insular sclerosis, and possibly hysteria, and also in certain forms of intoxication, as by alcohol, mercury and lead. Tremors have also been seen in the healthy cord after prolonged speaking, in cases of unilateral abductor or recurrent paralysis.

This is the whole of the literature I have been able to find bearing in any way on the subject, but though scanty it is extremely interesting and the cases have, I believe, never been previously collected. Reviewing them, we find they come naturally into two groups:

1. Those in which the pharyngeal and laryngeal movements were associated with and presumably due to severe nervous lesions, such as cerebral tumors, meningitis, tabes dorsalis, etc.

2. Cases in which the soft palate or some of its muscles were affected and in which the movements were apparently excited reflexly by some local catarrhal condition, nasal polypi, adherent crusts, etc.

The first class is by far the larger and contains all the cases of nystagmus-like movements of the pharynx and larynx hitherto described. In such circumstances, I naturally watched my patient closely and examined her repeatedly for any sign of a severe nerve lesion, but without any success. At the same time she was treated carefully for the relief of the post-nasal catarrh. In about three months this was much improved and the crust formation had ceased. Pari passu it was noted that the movements of the pharynx were becoming less frequent and less marked. At the present time, over four months from the commencement, the catarrh and the nystagmus of the pharynx and larynx have ceased.

This is, so far as I know, the first case of its kind ever recorded, but it seems to me possible that the pathogenesis of Dr. Bond's case may have been similar. The patient had middle-ear disease, and therefore is not unlikely to have had post-nasal catarrh, although there is no note of it in the report of the case. At any rate, my case seems to show conclusively that the so-called pharyngeal and laryngeal nystagmus may arise from simple local conditions quite apart from severe central nerve lesions. This fact is obviously of great importance with regard to the prognosis and treatment of these cases.

REFERENCES.

Bond: Journal of Laryngol., 1896, xi, 133.
Spencer: Lancet, 1886, ii, 702.
Oppenheim: Centralb. für Neurologie, 1889, 8, 132.
Scheinman: Referred to by Schultzen.
Dieulafoy: Bulletins de la Soc. Déd. des Hopitaux, 1890, vii, 843.
Legroux: Bulletins de la Soc. Déd. des Hopitaux, 1890, vii, 889.
Baginsky: Berlin. Klin. Wochenschr., 1891, 28, 1175.
Gerhardt: München. Med. Wochenschr., 1894, 41, 181.
Schultzen: Charité Annslen, 1894, xix, 169.
Seifert: Journal of Laryngol., 1887, i, 335.
Michael: Journal of Laryngol., 1887, i, 335.
Cornelius Williams: Centralb. für Laryngol., 1886, iii, 46.
Schadle: Journ. of Laryngol., 1888, ii, 429.

THE CONTROL OF NASAL HEMORRHAGE.*

BY J. M. CRAWFORD, M.D., OF ATLANTA, GA.

Hemorrhage from the nose is from many causes. From trauma, such as blows, falling on one's face, removal of enchondromas or exostoses with saw, gouge or other instrument. From a ruptured blood vessel seemingly without any cause. In the former cases hemorrhage is from the site of injury or point of operation. In the latter it is most usually, I might say always, on one side or the other of the septum, far in front. Hemorrhage often occurs from constant picking of the nose, and from a gradual thinning or wearing away of the walls of the blood vessels in this region. This occurs in cases of great debility, as in typhoid fever, etc. In case of persistent hemorrhage, from a point far back in the nasal cavity, I know of nothing better than a wet tampon of sterilized non-absorbent cotton (wet with cosmoline, alboline or peroxide of hydrogen). This plan, I might say, has been advocated by no one, to my knowledge, except myself. Others advocate the use of absorbent cotton, saturated with cosmoline or alboline; some with peroxide of hydrogen. The object of sterilizing is very plain, also the idea of using the non-absorbent cotton, instead of the absorbent, since we have in the absorbent just what we do not want. We have cotton without oil, and unless we replace the oil to a certain extent it makes a very poor hemostatic. We take the absorbent cotton and endeavor to replace the oil of which it has been deprived by saturating it with alboline. Would it not be far better to take the non-absorbent and add more oil to it by saturating it with cosmoline or alboline, and then use this as your tampon? The manner in which I use this is as follows: Having applied to the mucous membrane of the nose and throat a little muriate cocaine solution, I place my index finger of the left hand in the patient's mouth, extending up behind the palate. The end of this finger acts as a base on which to build, then with a probe I pack the nose as full with this sterilized non-absorbent cotton as I think needful. This tampon should not be allowed to remain longer than thirty-six hours. This measure I never adopt where the hemorrhage is from a point that can be readily seen. The cautery in such cases is quite sufficient.

---

*Read before the Southern Section of the American Laryngological, Rhinological and Otological Association, Atlanta, March 28th, 1898.

A FORM OF PRIMARY NASAL DIPHTHERIA.*

BY E. C. ELLETT, M.D., MEMPHIS.

The author considered the form usually spoken of as membranous rhinitis. After calling attention to the various causes of pseudo-membranous inflammations of mucous membranes, and pointing out the inability of the physician to separate the diphtheritic without microscopic examination, he relates two cases, both in boys, in whom the presence of a false membrane in the nose, proven to be diphtheritic by the presence of the Klebs-Loeffler bacillus, was unattended by any constitutional disturbance. Antiseptic treatment was followed by recovery in both cases. In reviewing the literature of the subject, many theories as to the cause of this condition are found to have been held by the older observers, but bacteriological examinations have shown that most of the cases are diphtheritic. The condition is mild, and slightly contagious, probably an attenuated form of diphtheritic infection. Ellett concludes:

1. While so-called membranous rhinitis is a disease of distinctive features and possibly a special affection, the large majority of cases are of diphtheritic origin, and should be treated as such and regarded as contagious.

2. The fact that it may be simple or diphtheritic is a cardinal reason why the noses of patients with rhinitis should be carefully examined, and any membrane therein submitted to a microscopist, since only by the microscope can we differentiate the two forms.

3. This form of nasal diphtheria leads to a chronic course, ending in recovery, and is influenced by antiseptic treatment.

4. We must regard the affection as diphtheritic until the contrary is proved.

5. In the present state of our knowledge, the presence of the Klebs-Loeffler bacillus imposes on us the duty of isolating these cases as contagious and reporting them as such to the health boards.

*Author's Abstract of article read at Annual Meeting of the American Laryngological, Rhinological and Otological Society (Southern Section) at Atlanta, Ga., March, 1898.

EMPYEMA OF THE MAXILLARY ANTRUM.*

ALEX. W. STIRLING, M.D., C.M. (EDIN.); D.P.H. (LOND.);
ATLANTA, GA.

The preliminary programme of this meeting gives promise of so many interesting papers that I shall limit the scope of my remarks and confine them to some points in relation to empyema of the maxillary antrum.

The commonest *causes* of this condition are diseases of the nose and dental caries; but which of these yields the larger crop is apt to be differently stated, according to individual circumstances. Surgeons connected with dental hospitals naturally see more cases originating in the teeth than in the nose; but, though they are, without doubt, a frequent cause, the mere fact of the presence of carious teeth in the upper jaw is scarcely sufficient evidence in all such cases that these originated the suppuration in the antrum. The close connection between the dental alveoli and the antrum is well exemplified in this skull, kindly lent to me by Dr. Jewett, a dentist of this city, in which we see a molar tooth, probably the third, has actually grown, with the crown forward and upward, into and is now lying almost entirely within the antral cavity, from which part of the outer wall has been removed. You will also observe that the canine tooth has no alveolus, but lies obliquely above the roots of the premolar, the crown presenting in the alveolus of the first molar without entering the antrum. Dr. John Wyeth, of New York, has reported a case of supernumerary tooth in the antrum, giving rise to empyema. Again, some months ago, I had a patient from the country who had submitted to the tender mercies of a traveling tooth-puller, with the result that he suffered severely for some days with all the symptoms of acute antral empyema. I had arranged to operate when he arrived in great glee with the root of a tooth in his pocket which had come out, not through the alveolus, but which he had sneezed out through his right nostril. Besides cleansing nasal lotions, no other treatment was employed, and the discharge immediately diminished and ceased entirely within a few days.

As an example of one of the ways in which nasal troubles may originate antral suppuration, I may mention a case on which I re-

* Read before the Southern Section of the American Laryngological, Otological and Rhinological Society, in Atlanta, Georgia, March 28, 1898.

cently operated. Pus formation had entirely ceased and the daily injections of fluid came clear through the normal opening into the nose. Then the patient, who was practically cured, took a severe cold in the head. The fluid at once ceased to come through the nasal aperture until a plug of stringy mucus had been dislodged by frequent forcible syringing, and even then it came not near so freely as before. A direct extension of the catarrhal process may start the antral inflammation, or a simple blocking of the ostium, through swelling of the mucous membrane, by polypi (in which deviation of the septum may play a predisposing part), by producing a rarefication of the air within the cavity, may suffice. The wonder is that antral congestion is not more common than it appears to be, but I am inclined to think that it is in reality of very much more frequent occurrence than is generally supposed, and that it, along with or instead of the frontal sinus, gives rise to the feeling of weight and pain at the root of the nose, so common in both coryza and antral affections and that some of the excessive discharge of muco-pus toward the termination of a cold comes at times from the mucous membrane of the antrum.

Besides these two main causes, antral empyema may originate in several of the infectious diseases, including influenza; there are almost certainly cases arising primarily in the antrum, and independent of disease elsewhere; while traumatism, such as operations within the nose or on the teeth, and blows, must be admitted as having given rise to a certain number of cases.

The *symptoms* complained of are mainly two, pain and purulent canary-colored discharge from the side affected. The pain is not always, though sometimes, referred to the cheek, but rather to the root of the nose and supra-orbital region, due probably to blocking of the orifice of the frontal sinus and consequent absorption of its air. It is often of a neuralgic and periodic character, relieved at once by surgical evacuation of the pus, frequently previous to this bearing no apparent relation to the amount of temporary accumulation or discharge of the antral contents. The pain in acute cases may be exceedingly severe and accompanied by considerable rise of temperature. Its severity and position will depend to some extent upon whether or not the pus is retained or discharged. In the former case it is more likely to be severe and situated in the cheek, and the secretion may even bulge one of the walls of the cavity, or make an opening for itself.

The discharge into the nose usually appears through the ostium in the middle meatus, but not invariably so. For instance, in a recent

case of my own in which the diagnosis was confirmed by operation, pus was never seen in that locality, though large quantities were constantly being discharged into the throat, and could be seen by posterior rhinoscopy lying near the Eustachian tube. Moreover, it was not till some days after the operation that the fluid injected into the antrum began to find its exit through the ostium rather than through the more posterior opening, by which it had been accustomed to enter the throat.

There is a marked difference between this disease and atrophic rhinitis, in so much as in the former the patient's friends suffer comparatively little from the odor of the discharge, while, his olfactory sense being intact, to himself the stench may prove most burdensome, and also lead him to avoid society from the idea that it is as unpleasant to others as to him. The general health, especially in long continued cases, is apt to suffer from a resulting mental depression, from anæmia, from loss of appetite and digestion, and the possibility also of the degeneration of the various tissues, which sometimes follows a prolonged purulent secretion, should not be overlooked. Both sides of the face may, of course, be affected. In that case special attention should be paid to the anterior ethmoidal cells which may be found to be diseased.

In making a *diagnosis* one must bear in mind this possibility of the disease being bilateral. The thick, canary-colored discharge is different from that due to simple rhinitis or to that due to a sequestrum in syphilis, which, too, can usually be discovered with a probe; in simple caries with a free discharge, fetor is not marked; a foreign body, though it may give rise to very similar symptoms, should be discoverable; the history and pressure symptoms should help in the diagnosis of malignant disease; pus originating in the sphenoidal sinus runs into the post-nasal space, and from the posterior ethmoidal should be seen in the space between the middle turbinal and the septum, or in the post-nasal space. But the openings from the maxillary antrum, from the frontal sinus and from the anterior ethmoidal cells, are all close together in the middle meatus, about an inch posterior to the anterior end of the middle turbinal, and when we find there a thick yellowish discharge, quickly recurring after removal, we may expect disease of one of these, most frequently of the antrum, which, however, is rarely only the receptacle of pus draining through a rupture in the wall of the infundibulum, or directly from the ethmoidal cells, and not its seat of origin. When the head is lowered, with the affected side uppermost, the discharge will run more freely, but it may do that also in frontal empyema, as shown

by Greville MacDonald, probably from a resulting admission of air. The pain may give no sure indication of the seat of the disease, for in maxillary empyema it is situated more in the frontal region than in the cheek. The amount of discharge at one time must bear a relationship to the size of the cavity from which it comes. One must not trust too implicitly that in antral disease the secretion will appear at the usual site, for, as already indicated, that spot may be entirely free from it, while it may flow copiously from an aperture at the posterior extremity of the cavity. Thus, the most important feature for diagnosis of empyema of one of the anterior cavities may be wanting. Percussion of the teeth with wood or steel may prove of some assistance. Voltolini's electric lamp may show a less brilliant illumination of the affected side, especially when viewed through MacBride's tube of dark metal, but it alone is not to be relied upon. A solid tumor in the antrum will distinctly interfere with the passage of light, while a cyst will rather increase the transilluminating power of the lamp.

But there is only one certain means of diagnosing that the maxillary antrum secretes or receives pus, and even that requires certain precautions to prove entirely reliable—I mean exploratory puncture. It is possible when the usual exit is large for the cavity to completely empty itself, especially as the secretion, like the pain, appears to be subject to a certain periodicity. If a puncture be made at such a time, one will, of course, fail to find pus. This happened to me in the case already referred to in which the pus appeared, not in the middle meatus, but in the posterior naris, for not only did no pus exude through a large canula, inserted through the outer wall near the floor of the antrum, but no sign of pus could be found on a cotton-tipped probe with which the mucous membrane was searched. I had previously, on account of the amount and position of the pus, decided that it could come only from the antrum. But when I discovered that just before the puncture was made the patient had strenuously endeavored to get rid of all the pus, and that the discharge for days later was tinged with blood, I determined to try again; this time, in the morning. In the former instance I had punctured with the patient under ether, and prepared to go on to complete operation; but this time I used only cocaine; got pus through the canula, and drove large quantities of it with a syringe, not into the nose, but into the throat. (On the sixth day after the operation proper, the fluid injected came out almost entirely into the nose.)

Prognosis.—As already said, I am inclined to think that acute inflammation in the maxillary antrum is more frequent than is gener-

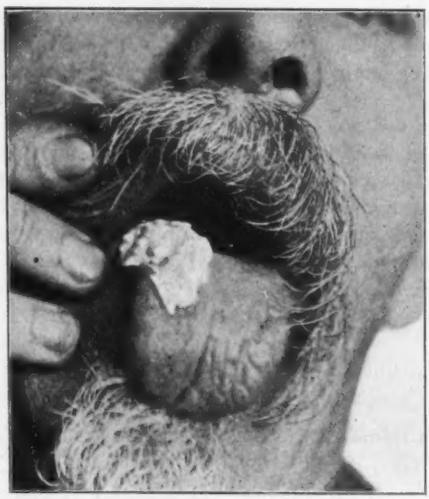
ally thought, and that therefore many of these cases recover spontaneously, either permanently or until another "cold" sets in. After the opening and washing out of the antrum, some, even old cases, quickly recover, especially under proper treatment for the interior of the cavity. In some others the mucous membrane has undergone such change that strong measures must be taken to bring it to a healthy condition, and there is always some chance of relapse where the original cause has not been completely removed.

Treatment.—In acute cases, the cause having been as far as possible removed, an endeavor should be made to keep the ostium patent by bringing the nasal mucous membrane to as nearly a normal condition as is practicable. I have no personal experience of injections through the ostium, though they are advocated by some. Throwing lotions forcibly against the ostium sometimes opens it, and so does Politzeration. In some acute and in chronic cases, the antrum is best treated by drainage and applications made through an artificial opening through an alveolus, in the inferior or middle meatus of the nose, or through the external wall. Opinions differ concerning the point of election, and I have, personally, not made use of the nasal route. The alveolus of a diseased tooth is often the most convenient, but especially when the teeth are healthy or have been some time absent, I am content with an opening through the external wall, large enough to admit a finger, for exploratory purposes, which can be made by a flap operation or otherwise. I am satisfied with the benefit of the application of nitrate of silver, say twenty grains to the ounce, to the antral wall after the cavity has been washed out, and the subsequent packing with iodoform gauze, which can be continued as long as necessary, or for which lotions, antiseptic and astringent, can be substituted; or powders. or iodoform dissolved in ether. Some prefer to insert a drainage tube and bring it out in the inferior meatus. If there is much thickening or pouch formation, or granulation tissue, curetting may be advisable, and polypi must, of course, be removed.

REPORT OF A CASE OF LIPOMA OF THE TONGUE.*

BY HAL FOSTER, A.B., M.D., KANSAS CITY, MO.

The patient which I present, Mr. E., is sixty-two years old, and lives at the United States Military Home, in Leavenworth, Kansas. He enlisted from New York in our late war. He is a strong, healthy-looking man for sixty-two years. His health has always been good. He used tobacco for many years. Five years ago he first noticed a small, white growth on his tongue, which grew to its present size



very rapidly. Thinking tobacco might in some way do it harm, he discontinued its use immediately. The patient was absolutely certain that it was cancer and has brooded over it a great deal, and this constant worry has made him somewhat of a neurasthenic. He informed me that on several occasions he had made up his mind to have the entire tongue removed. The growth has never caused pain, but he has worried mentally a great deal on its account, thinking that it

* Read before the Kansas City Academy of Medicine, March, 1898.

would eventually cause death. December 15, 1897, he presented himself for examination. This large tumor which I now present for your inspection was removed. A small portion was subjected to a microscopical examination, before the operation, in order that there should be no mistake. The growth was pronounced a lipoma. A ten per cent solution of cocaine was applied several times to the tumor, and after waiting twenty minutes, a cold snare wire was used and the growth was carefully and slowly removed. Immediately after its removal the galvano-cautery was applied. The bleeding was very slight. A solution of aristol-menthol in liquid benzoinal was applied several times a day. In one week the wound had entirely healed as you now see, there is not even a scar left. The man is now entirely well.

This is the first case of lipoma of the tongue which has ever come under my personal observation. In looking up the literature on the subject, I have found other cases similar to the one reported. Writers admit that they rarely occur on the tongue. They frequently occur on the body.

I presented this case before the Kansas City Academy of Medicine on account of its rarity—that is, of being on the tongue. If you will carefully examine this patient's tongue, you will observe that there is not even a scar left to mar its usefulness. It has been several months now since the growth was removed and there is not the slightest indication of its return. I am quite sure that it will never return.

Gelatin as a Hemostatic. (*Amer. Med. and Surg. Bulletin*, Vol. 12, No. 1.)

Dr. Paul Carnot has employed this substance as a local hemostatic in epistaxis, meteorrhagia, wounds and surgical operations. He uses a warm—not hot—5 to 10 per cent solution of gelatin in a sterilized salt solution. In severe nose-bleeds he syringes into the nose from 30 to 40 c. c. (8 to 10 drachms) of a 5 per cent solution and stuffs the nasal cavity with a cotton tampon saturated with the same solution.

PERITONSILLAR ABSCESS.*

BY DUNBAR ROY, A.B., M.D.

Professor Ophthalmology and Otology in Southern Medical College, Atlanta, Ga.

The reading of this article is more for the purpose of precipitating a discussion than an effort to add any new ideas upon the subject. A great deal has been written by laryngologists concerning the etiology, symptoms and treatment of acute tonsillitis and chronically hypertrophied tonsils, but very little can be found concerning the manifestations of peritonsillar abscesses, and even the various text-books dismiss this practical subject with but few words, if at all. Fletcher Ingalls in his excellent work denominates this condition as phlegmonous tonsillitis, giving as synonyms "suppurative tonsillitis," "abscess of the tonsils," "quinsy," "phlegmonous sore throat." To my mind these synonymous terms are incorrect, for in my experience the abscess is nearly always outside the tonsil. Phlegmonous sore throat is inaccurate because it does not designate what portion of the throat is involved. The practical point of opening the abscess is dismissed with one sentence. Sajous in his text-book makes no distinction in the forms of tonsillitis, but considers them all together and the condition of abscess of the tonsil but a final result of acute tonsillitis. He also calls it an abscess of the tonsil and speaks of opening the abscess through the tonsil.

Lennox Browne, while recognizing this condition, devotes very little space to its consideration. He remarks that Cohen uses the term "phlegmonous pharyngitis" as synonymous with tonsillitis, but remarks "that the peritonsillar tissue is affected rather than the gland itself in phlegmonous inflammation."

Max Thorner, in Burnett's System, has given a very good description of this affection under the title of phlegmonous pharyngitis.

Dr. C. E. Bean, in the same work, has also described this affection under the title of acute tonsillitis.

Thus we see that various writers differ as to the pathology and morbid anatomy of this affection.

Thus we see the condition which I wish to speak of to-day—I have designated as peritonsillar abscess. Phlegmonous pharyngitis is, I

*Read before the Southern Section of the American Laryngological, Rhinological and Otological Association, Atlanta, March 28th, 1898.

think, an inelegant term, since it does not indicate the anatomical position of the abscess, and therefore does not differentiate it from similar conditions in other portions of the pharynx.

The tonsil is lymphoid structures, situated between the two palatine arches, the anterior and the posterior. It is freely movable in its bed and in the large majority of cases it presents fibrous adhesions to both the anterior and posterior palatine pillars. The muscular structures, therefore, inclose the tonsil on all sides, except its free portion. In front, the ramus of the lower jaw encroaches so near the tonsil that there is very little loose cellular space left which could be filled with pus and exudate, going to form an abscess. Pus always seeks that region where there is the least resistance. On the other hand, the anterior pillar curves around the top of the tonsil and seems to lap itself over the posterior pillar and is lost in the soft palate above. This is what really happens. Posteriorly to the tonsil there is quite a loose cellular space which could be filled with pus should the emergency come. The lapping of the anterior and posterior pillars above seems to have formed a triangular space filled with connective tissue and with which the tonsil communicates.

For these anatomical reasons I have never seen a peritonsillar abscess, the result of infection through the tonsillar lacunæ, but what had its seat posterior to the tonsil. Abscesses which occur anteriorly, in my experience, are the result of suppurative processes from the posterior portion of the alveolar process of the lower or upper jaw on the same side. I have seen abscesses in front of the tonsil of the most painful character which were the result of a process in the last molar tooth.

The question now arises, what is the cause of these peritonsillar abscesses? Some authors hold that they are always the result of a previous tonsillitis.

In the light of our present knowledge there can be no doubt in my mind as to the bacterial origin of this affection. It is certainly true that in the large majority of cases a severe inflammation of the tonsil precedes the formation of the peritonsillar abscess, and yet I have seen cases where the abscess has formed and the tonsils remain seemingly scarcely involved. We all know that there exists, normally, in the mouth and throat, secretions containing various kinds of microorganisms; therefore, when a tonsillitis does take place, there must be superadded something which previously did not exist, and much the more so when an abscess is formed. For it is the daily observation to see cases of severe tonsillitis of the most virulent type, and yet no abscess is seen to follow. Some authors say that it is due at the time

to some lowered vitality of the parts or the whole system whereby the parts are unable to throw off this concentrated poison. Observation certainly seems to contradict this idea, unless there is some lowered vitality of the parts not now recognizable to the medical eye; for the worse cases of abscesses which I have ever seen have occurred in persons showing the most perfect physical health.

The tonsillar crypts and ducts are certainly the carriers of the deadly organisms, for in the large majority of cases these crypts show follicular exudates previous to or at the time the abscess develops. Whatever may be the condition of the parts, one thing is certain, and that is, this affection is microbic in origin and the warfare between the leucocytes and the pus-forming organisms certainly results in a victory for the latter.

Must we not in the end be obliged to admit that there exists a peculiar idiosyncrasy in the individual which we are unable to explain, whereby his or her throat is liable to the formation of peritonsillar abscesses? One attack seems to predispose to another and there are some people who seem especially liable to just such attacks. I have one patient who usually has one severe attack every winter, yet when the attacks are over the tonsils do not show any pathological changes.

Is it not, perhaps, in the existence of this triangular space of which I have spoken that predisposes to the formation of an abscess? I have nearly always noticed that in persons who suffer from these abscesses the anterior pillar seems to lap more than ever the posterior, and it is but a surmise on my part that in these cases there is a larger posterior cellular space for the filling up with pus.

Rice, of New York, in the Cincinnati *Lancet-Clinic*, in a very exhaustive and excellent article on suppurative tonsillitis, has this to say in his summary:

"That suppurative tonsillitis is not a correct name, because the suppuration occurs in the connective tissue about the tonsils and very rarely in the tonsils themselves. That in people who possess the disposition to suppuration about the tonsils, we find the tonsils either adherent to or covered by the pharyngeal pillars, and that this condition plays a more important role in the predisposition to suppuration about the tonsils than does the rheumatic or other diathesis."

Such a space affords an excellent bed for the propagation of pus germs. Nor have I ever seen any special character of tonsil which seemed to predispose the formation of an abscess. I have seen abscesses form where tonsils were small and sclerosed, and again where they were large and lymphoid looking. I have even seen abscesses form when the tonsil had been completely removed.

Most writers hold that peritonsillar and tonsillar abscesses are more common in children than in adults, and yet if one's experience counts for anything, mine is just the opposite. With the exception of two cases only, all my cases have been in adults.

The symptoms of this condition are, no doubt, familiar to all. The pain is severe, and especially intense on deglutition, at which moment the patient distorts his face, makes forced movements with his whole body in his effort, perhaps, to swallow even a drop of saliva. This pain is pathognomonic, and even in the very earliest stages is often indicative of the coming abscess. The pain is due to the inflammatory condition of the muscles of deglutition and it is for this reason, I think, that so many authors believe that a rheumatic diathesis is at the bottom of it all. This view my observation does not lead me to accept.

The coated tongue, the fetid breath, the half-open mouth, the look of pain—who does not recognize these symptoms?

Let us now turn to the practical side of the question; that is, its treatment. Since, as I have said, the large majority of cases result from a previous inflammation of the tonsil, the question naturally arises, can the abscess be aborted? My views are that if the patient is not one of those predisposed to peritonsillar abscess and the inflammation in the tonsil has started upon its surface, that you may in some cases abort the abscess, but in the large majority of cases you are powerless to stay its course. The treatment of tonsillitis and also peritonsillar abscesses naturally divides itself into the medicinal and surgical. Under the head of medicinal, let us look to see what remedies are suggested by various authors as abortive or curative in their action.

Ingalls says, to use his exact words, "early in the attack the disease (phlegmonous tonsillitis) may be aborted as in acute tonsillitis, in about one case out of four, by the application to the inflamed gland, once or twice a day, of a sixty-grain solution of nitrate of silver, two or three applications usually being sufficient." Of this procedure I can but speak in the very highest terms in all forms of acute tonsillitis, and, in my mind, it should be placed above all other remedies. Dr. Ingalls' experience with guaiac is just as mine has been, and that is very unsatisfactory. He believes in sodium salicylate and bromide of potash. He recommends cold applications, both inside and outside, but also remarks that some patients are made uncomfortable by cold applications and then hot ones should be applied. He believes in promoting resolution if the abscess cannot be aborted.

Sajous says that we possess a remedy which is a specific in all

forms of tonsillitis, and that is the amoniated tincture of guaiac. He prescribes it as follows: one teaspoonful in half glass of milk, to be gargled in the throat and then swallowed. He also recommends lozenges of the resin of guaiac. He recommends a gargle of water, hot as can be borne, a procedure which I have long ago found to be a most excellent adjuvant for the relief of pain. As to the use of guaiac, I can but say that in my hands it has proved absolutely useless.

Lennox Browne considers guaiac to be almost a specific, and he says further that this action of guaiac "strengthens the rheumatic analogy." He is a great believer in large doses of salicylic acid. He says that sprays and inhalations are useless, while ice internally aggravates the pain. Like myself, he believes in hot gargles of some mild antiseptic solution. He considers the application of cold externally, by means of the Leiter coil, one of the most valuable local applications.

Bosworth thinks "that it is possible to abort an attack within the first twenty-four hours by giving ten grains of quinine and one grain opium, administering a hot foot-bath, evacuating the bowels by fifteen grains of calomel, to be followed by a saline purgative, and giving sodii salicylas and applying locally to the throat sodii bicarb." I must say that this is a most drastic remedy, and if the patient survives it, nothing short of a cure should be his reward.

Max Thorner recommends the administering of large doses of salol in addition to local applications. I am in full accord with this writer who expresses not much belief in cold applications, but says, "it is much better to begin early with hot fomentations around the neck, hot gargles and hot inhalations, in order to accelerate suppuration and to shorten in this way the duration of the disease."

Dr. C. E. Bean, in Burnett's System, says that he places more confidence in salicylate of soda than in any other remedy. He says that usually permanent relief will be obtained in twelve hours. He administers it in doses of fifteen grains every hour.

Gouguenheim, of Paris, has extolled the use of large doses of salol.

Let us now look to the surgical side of the treatment, where the abscess is either suspected to have formed, or at least shows all evidences of the same. I will first take the liberty of again quoting the opinions of those who have expressed themselves, and in conclusion will add my own practical ideas to this practical subject.

Ingalls says "pus should be evacuated as soon as discovered." He does not say where the incision should be made, how deep it should go, nor the most usual place for the bulging to occur. These points I consider of very practical value.

Sajous says that the abscess should be evacuated as soon as it is discovered by digital pressure and the incision is made through the tonsil.

Lennox Browne lays down the following rules, which I quote:

1. Never to inflict unnecessary pain by useless scarifications on the surface of the tonsil undergoing inflammation.

2. Never to make deep incisions unless there is almost certainty of advanced suppuration. The instrument for making the incision should be a curved-pointed bistoury, with not more than one inch of cutting edge, and the cut should be made from without inward, so as to avoid the not impossible risk of injuring an artery.

Bean says the abscess should be opened as soon as pus is detected and that it should be done with a bistoury, whose cutting edge is an inch long. He says also that the point for opening the abscess is usually "at the upper and anterior surface of the tonsil near the anterior palatine fold."

My observations certainly do not agree with this latter statement. Max Thorner also says that the abscess should be opened as soon as discovered, and gives the method of Stoerk for diagnosing the condition. The physician "puts the fingers of one hand externally under the angle of the lower jaw, pressing the skin and all the tissues inwardly, while the index-finger of the other hand moves slowly over the infiltrated parts, beginning high up on the soft palate and sliding downward toward the tongue." The sense of resistance is the criterion for the point to be opened. This is very good for a German method, but it is decidedly too rough for an American patient, as it frequently happens that you are fortunate if you can just get in the flat blade of a bistoury between the half-open mouth.

Moure, of Bordeaux, says "it is the rule to-day not to wait for the appearance of pus before incising the inflamed tissues." He says further that a peritonsillar abscess should be opened through the anterior pillar by a longitudinal incision.

O. Chiari also advises early incision, even when no pus is discovered, and says the abscess should be opened at the anterior pillar. My own experience certainly does not agree with that of the last two writers.

Gouguenheim, of Paris, deprecates too hearty operative measures in phlegmonous tonsillitis. He admits surgical intervention only in exceptional cases, and that is when the appearance of whitish transparent spots reveals the purulent focus.

My own treatment of peritonsillar abscess is governed by a rule which I have adopted in the treatment of all patients, and that is the

adapting of all treatment to the individual case and not the patient to the treatment. It is the extreme of folly for physicians to have fixed rules in the management of all cases. It might be highly proper in the case of a big, strong, lymphatic workingman to pick up your bistoury and plunge it into the abscess, press its sides and evacuate the same thoroughly, and he perhaps would hardly flinch. But suppose you undertook the same procedure in the case of a highly nervous and sensitive woman who would even faint at the sight of a knife? Besides, it is equally true that the formation of a peritonsillar abscess is not near so painful in some patients as in some others and therefore do not require such active surgical measures. As the majority of abscesses follow from a tonsillitis, my efforts are always to the abortion of this inflammation, and this I accomplish, if at all, by the administration of a good dose of calomel, followed by a saline purge. The tonsil and surrounding pillars are painted thoroughly with a sixty-grain solution of nitrate of silver, and this is repeated once daily. I start early with hot gargles of vinegar and water, as hot as can be borne, and then hot fomentations are applied externally. Salol and phenacetin always make the patient feel more comfortable, and for this reason alone I prescribe it.

Recently we have all seen the published reports of the wonderful effect of lactophenin in this condition. According to my experience it is no more good than so much sugar of milk. If, then, this does not abort the abscess I increase the use of hot remedies and wait until I detect fluctuation. In nervous and timid individuals I never try to open the abscess until it is so superficial that the slightest puncture will rupture its walls. Making deep incisions at random without finding pus is an unnecessary and barbarous treatment.

Nor have I ever opened a peritonsillar abscess at any point except above and posterior to the tonsil, notwithstanding such eminent authority as quoted above. Nor, furthermore, do I make deep incisions with a knife, but simply make a small puncture about one-eighth of an inch deep, and then with a strong probe in this opening I push it back into the triangular space described. If there is pus the probe will readily make its way and the presence of pus detected at the opening. If present, the superficial incision is enlarged and the abscess emptied by pressure. I do this rather than make a deep incision, because I have seen such an incision followed by severe hemorrhage and no pus found, and if the patient is at all nervous, be it man or woman, the sight of spitting out great clots of blood is extremely terrorizing. While writing this article I came across two references in THE LARYNGOSCOPE to articles by German laryngolo-

gists whose ideas correspond with mine. I quote the exact words translated from Killian's article: "Most of these abscesses are located in the depression above the tonsil (fossa supratonsillaris) and between the arches of the palate. To inspect this region the patient's tongue is extended and depressed.

"The commissure of the lip is retracted and the head inclined toward the shoulder of the diseased side. In an abscess of any considerable size, one can see an oval bulging of the affected side. This area is cocainized and by pressure upward and outward with a strong probe the abscess cavity can be reached. The opening is then dilated with forceps for several days and antiseptic gargles ordered."

Grunwald, in the *Muenchener Med. Woch.*, endorses this method and insists that an abscess that cannot be reached in this way has no connection with the tonsil. In support of this view, he reports an abscess of the anterior palatine arch and velum, due to a decayed molar tooth and its alveolus. This last view corresponds so entirely with my own that I feel like taking it as my own utterance. If any amount of pus has formed, noted by a swelling above and to the inner side of the tonsil, I can usually detect the point for opening by simply sliding a blunted probe over the surface and noting the point of greatest pain. My views correspond with those of Lennox Browne, and that is, never to do unnecessary cutting.

The question also arises, if the abscess is not opened will it open itself? It most assuredly would, but I have never waited for such a result to happen. In the first place, it might open while the patient was asleep and cause some dangerous symptoms. Such cases have been reported. Dr. Dunn, of Richmond, Va., has reported the case of a child three and one-half years old, where a peritonsillar abscess broke spontaneously, followed by such severe homorrhage that the common carotid had to be ligated.

Norton has reported a case of acute suppurative tonsillitis in a girl of four years which ended fatally, the abscess having involved the carotid.

Thus we see that peritonsillar abscesses are by no means an insignificant affair. Every physician, no doubt, manages his cases differently, but after all we want to use those measures which will bring the best results.

Grand Opera House.

GAUZE PACKING FOR SUPPURATING EARS.*

BY ALICE EWING, M.D., CHICAGO, ILL.

Lecturer on Otology in the Chicago Post-Graduate Medical School.

A little more than one year ago, at the suggestion of a professional friend, I began the treatment of chronic suppurative otitis media with gauze packing. The rationale of this method appealed to my reason so strongly, at once, that I wondered why it had not long before been thought of as the only strictly surgical measure to carry out in this disease.

All that I have seen in literature upon this subject is an article by Le Moyer, of Paris, published more than two years ago, in which he mentions the use of iodoform gauze in acute cases. I am under the impression, however, that it is being used to some extent by the profession, and all that I hope to gain by this paper is to emphasize its importance by giving my own experience with it, and my own positive convictions with regard to its superiority over other methods in use.

If the disease under consideration were confined to regions readily reached by the douche, or by the cotton applicator, it could be very easily disposed of; but, extending as it does to the cavities accessory to the middle ear, it is quite another matter. A moment's consideration of the anatomical structure of these cavities is sufficient to convince one that it is impossible to thoroughly cleanse them in any way except by radical surgical measures. We have to deal with a series of bony recesses, furnishing all the conditions necessary to support the life and growth of the pyogenic microbe; namely, a favorable temperature, a suitable culture soil, the blood serum from the capillaries of their lining mucous membrane, or from the diplöetic vessels, and a quiet retreat, out of harm's way. How can we most effectually invade these strongholds?

We have certain so-called antiseptic drugs. We know by actual experiment that solutions of certain strengths of carbolic acid, bichloride of mercury, etc., will stop the growth of, or render inert, cultures containing the various pathogenic germs when freely exposed to their action.

But what happens when a chronic suppurating ear is douched? The

*Read at the meeting of the Western Ophthalmologic and Oto-Laryngologic Association, Chicago, April 7th, 1898.

external auditory canal is cleansed, possibly. If the tympanic membrane has been destroyed the tympanic cavity may be rendered fairly clean, but in the attic, the antrum and the mastoid cells what occurs? A small quantity of pus may be washed out, a considerable quantity remains in, to which is added a proportionally small quantity of the douche, which may percolate down even to the lowest cell. If the douche is plain, sterilized water, has microbe life been hindered or helped? Suppose the douche carries in solution the bichloride of mercury. We know only approximately the chemistry of pus; we know that it is composed of the elements of the blood in a greater or less degree of decomposition; we know that all animal tissues are very unstable, readily giving up their constituents to unite with those of other bodies to form new compounds. Is it irrational to suppose that the whole quantity of the antiseptic agent may be exhausted by entering into chemical combination with the portion of pus which comes into immediate contact with it to form inert bodies? For example, with the fatty elements to form mercurial soap, or with the albuminous portions to form a coagulum, leaving plain H_2O., added to a good quantity of undisturbed pus and microbes. Suppose that peroxide of hydrogen is poured into the ear, the excess of oxygen is exhausted in decomposing pus, and we again have H_2O., plus pus and microbes, as before. What is more helpful to the growth of vegetable life than moisture? Every medical person has observed how aggravated a suppurating disease is in humid weather, and how much better in dry weather. Why does the grass on our lawns dry up and then freshen again as the weather is dry or rainy? I look upon douching a chronic suppurating ear as watering plants. The douche is unsurgical. Its universal use accounts for more hopelessly chronic cases than anything else. It has but one support—tradition. It is contra-indicated in every case in which the drum membrane is not intact.

If microbe life cannot be destroyed in the attic, the antrum and the cells by antiseptics, in the form of watery solutions, what idea can be carried out? Simple drainage. It cannot be hoped to drain out the last pus cell, or the last microbe, but moisture may be withdrawn to the extent that they perish for want of it.

I could cite a number of cases in which gauze packing has succeeded when, seemingly, all other methods had failed. I will mention two, however, which have not been cured, because they illustrate better the points which I wish to bring out.

Case 1. A boy, seven and one-half years of age, came to our clinic for the first time one and a half years ago with the following history: A

puny baby, with suppuration of both ears at three months of age, which was apparently cured; measles at one year of age, followed by suppuration of both ears, which has continued down to date. There was total destruction of both membranes when he appeared at the clinic, the promontories were covered with an abundance of soft granulation tissue; there was a profuse discharge of foul-smelling pus from the ears, and marked loss of hearing. For six months I worked faithfully with everything that I had ever heard of being used, with temporary improvement and then relapses. Then I began packing three times a week with iodoform gauze, after having cauterized the granulations thoroughly. For a time improvement was quite marked, but when the humid days of summer came the treatment had little effect. He would return to the clinic with bloody, foul pus draining through the gauze and running down the neck. A radical operation on both sides was advised, but the parents declined. I then commenced packing each day, including Sundays. Both canals were packed firmly, the conchæ were filled with gauze, a pad of absorbent cotton placed over this and held in place by a netting bandage. At first the whole quantity of gauze was saturated, and even the cotton pad, but the discharge began promptly to decrease, and at the end of five weeks it had apparently ceased. Packing was continued for some weeks, when he disappeared from the clinic. In January he returned, with a little thick pus in both ears. It has been necessary to keep a small piece of the gauze in the ears most of the time since. A little attention, however, keeps them in check, and for the first time in his life, and he is now nine years of age, he has been able to go to school without interruption.

I do not think that suppuration has ever been completely arrested, and I doubt if it can be entirely eradicated without surgical measures, but feel confident that this treatment has accomplished more than anything else could have done. I also feel confident that if douching were again instituted the old condition of things would supervene. The infection remains, the culture supply remains, but the constant drainage keeps the moisture insufficient, and microbe life is thus kept at a low ebb.

This idea is in accordance with the principles of modern surgery. The general surgeon douches the open joint, then dries thoroughly before closing, and he has little excuse for sepsis; but in abdominal surgery the douche has been abandoned, even if an abscess or cyst is accidentally evacuated into the abdominal cavity, gauze drainage is considered the safer measure, for the reason that, owing to the contents of the abdominal cavity, all parts cannot be thoroughly exposed

to the action of the antiseptic fluid, and thoroughly dried. The peroxide of hydrogen is no longer used in the suppurating abdominal wound, the dry dressing and gauze drainage being more successful.

One of my instructors in Vienna said: "If you forget everything else that you have heard from me, remember never to douche the traumatic-ruptured drum membrane; if you do, it is sure to suppurate; if you let it alone it is sure to heal. The infection is in the external auditory canal, and blood serum is in abundance from the contused tissue, but if left dry it soon dessicates." I had an opportunity to see this verified, as a number of cases had been syringed before coming to the clinic, or were accidentally syringed by the attendants.

Those who believe that the douche has a place in the treatment of these cases, avoid its use to clean out powder and epithelium from the external canal in cases in which suppuration has ceased under dry treatment, for fear of starting it again. I maintain that if douching will start suppuration, when it has apparently ceased, it will help to keep it up when it has not ceased.

As to the preparation of gauze employed, one must use some discretion. The iodoform, on the whole, has given me the best results, but in some cases an eczema has been occasioned, and in a few tenderness and swelling of the canals, enlargement of the glands about the ear, and, in one, even constitutional symptoms. In these the bichloride or borated gauze may be substituted.

Case 2. A boy, eight years of age, presented at the clinic January 15 last; had had suppuration of both ears for three years, following scarlet fever. Had been in fair general health till two weeks previously. He was pale and weak, complained of frontal headache, sleeplessness, loss of appetite, and had some elevation of temperature and profuse sweating at night. He was referred to the general medical clinic for examination, and was returned with the diagnosis of slight general sepsis, from absorption from the ears. A little tonic was prescribed, and packing of the ears with iodoform gauze, on alternate days, was commenced. Improvement was marked at once. He had a large quantity of adenoid growths in his naso-pharynx, which were removed when he was strong enough to bear the operation, and he was soon quite well.

The suppuration diminished slowly, and after a few weeks of treatment it seemed necessary to pack every day. After a week of daily packing his canals became red, swollen and sensitive, the glands about the ears enlarged; he complained of frontal headache, sleeplessness and loss of appetite. The ears were packed with plain gauze for a few days and these symptoms disappeared; then bichlo-

ride gauze was employed, but symptoms of poisoning returned, and plain gauze, dried out and scorched a little in the flame, was substituted. Improvement is going on nicely, and I am quite positive that within a short time the suppuration will cease.

If this treatment had nothing else to recommend it, the saving of time would place it above all other forms of treatment. If correctly carried out, the pressure of the gauze upon the diseased surface will keep granulation from returning. In most cases the exfoliated epithelium comes out with the packing, and it is only necessary to repack, or possibly dry out, with a tuft of cotton. It is also convenient for home treatment. People of only small intelligence can be taught to wind the gauze around a toothpick and insert it into the ear fairly well.

In recapitulation, the gauze packing is more correct in principle and more satisfactory in practice than anything in use in the treatment of chronic suppurating otitis media.

Incurable cases can be kept more comfortable with this than anything else. It saves the time of the specialist.

It is suitable and safe for home treatment. It has no contra-indications.

A Case of Extreme Deafness in Which Great Improvement in the Hearing Followed the Use of Pilocarpine.

Dr. Gorham Bacon, of New York, reports the case of a male patient of thirty-three years who, when first seen, had both tympanic membranes destroyed, and the ossicles bound down by adhesions. (*New York Medical Journal*). There was a slight discharge from the ears. Under the hypodermic injection of pilocarpine, the patient, who had formerly been able to hear only by means of a trumpet, could now hear the raised voice at a distance of one and a half feet. The remnants of the drum-head and ossicles were then removed, this being followed by greater improvement in the hearing.

The author has obtained the best results from pilocarpine in cases of sudden deafness due to syphilis. SCHEPPEGRELL.

MASTOIDITIS IN A FIVE-MONTHS-OLD BABY—OPERATION—RECOVERY.

BY GEO. F. KEIPER, LAFAYETTE, IND.

The case herewith presented is interesting in several particulars:

First—Because it is probably one of the youngest patients ever operated upon for mastoiditis.

Second—It demonstrates that purulent otitis media in a baby of that age is one of the most dangerous conditions imaginable. The sutures between the cranial bones are very incomplete, while the inner cranial table is very thin. Moreover, the blood supply in the mastoid antrum and tympanic vault is very free, and the relation of the blood supply to the venous channels of the cranium is very intimate. Hence often the presence of meningitis in babies afflicted thus.

Third—Because physicians should make it their duty to instruct parents that earache in young children is dangerous and that the instillation of the old-time mixture of laudanum and sweet oil does not cure, but often masks a process which may cost a life.

On February 14, 1898, Mrs. Herman Bylsma came to the office with her five-months-old baby girl, which the mother nurses.

The family history is excellent, and the baby is the fifth of a line of very healthy children. A month previously, after a severe earache, the baby's right ear began to discharge pus, to which no particular attention was paid, save to drop into the ear a mixture of sweet oil and laudanum to control the pain. She noticed a swelling forming, several days thereafter, which gradually increased in size until her visit to the office. She poulticed it. No result. At the time of the visit, the condition was as follows: The auricle stood at a right angle, with the head behind, which was an immense swelling about the size of a hen's egg, filled with pus. The ear discharged pus. After examination, she was informed of the nature of the trouble and an immediate operation advised, which advice was accepted. At 11:30, the same morning, in company with Drs. Geo. F. Beasley, M. M. Lairy, E. Rodenhins, G. K. Throckmorten and Adah McMahan, we went to the child's home. There after careful preparation, an incision was made; small at first, to drain out several ounces of pus, and enlarged afterward, to gain a clear view of the mastoid process. The bone was found carious, with a small sinus leading into it. This was enlarged by cutting away all dead bone

until healthy bone was reached in all directions. A cavity was thus made in the bone large enough to put the tip of the index finger to its bottom. The wound was packed with bichloride gauze and a pressure bandage put on. The dressings were removed every day for a few days, and then less frequently until March 10th, when they were removed for good, because the wound was entirely closed up.

On February 20th, the left ear began to discharge, but by cleansing and dry-dressing it with boric acid powder, the discharge ceased promptly, thus showing what might have been done had the first ear received prompt attention.

Peculiar Lodgement of a Fish Bone. (*N. Y. Medical Journal*, Feb. 19, 1898.) Dr. M. D. Magee, Washington.

The patient, a male, complained of pain and uneasiness in throat after swallowing fish bone. Nothing unusual was noticed on ocular examination. Finger revealed distinct pricking sensation in passing over right tonsil. Small white speck in a tonsillar crypt was seen, which, in being withdrawn, proved to be a semi-circular piece of fish bone, half an inch in length. Pain was mostly confined to the right ear. LEDERMAN.

Empyema of the Antrum in a Child Three Weeks Old.

Alexander Douglas (*Australian Medical Gazette*, December 20, 1897) reports the case of an infant of three weeks, brought to him on account of an inflamed eye.

The right cheek was swollen, right eyeball protruded, eyelids hyperæmic and conjunctiva congested. On examining the mouth, the right side of the roof was seen bulging into the mouth. The superior maxilla was prominent in every direction. Pressure over the cheek caused pus to exude from the right nostril. The diagnosis was empyema of the antrum.

An opening was made inside the mouth, external to the alveolus, and pus flowed freely. Subsequently the cavity was washed out by syringing through the opening in the mouth with boracic lotion.

The case did well, the threatened bursting of the abscess into the orbital region being averted; the distortion of the right side of the face gradually disappeared, and the right eye was practically returned to the normal level. The child fully recovered.

EATON.

MASTOIDECTOMY, INVOLVING LATERAL SINUS COMPLICATIONS.*

BY J. O. STILLSON, A.M., M.D., INDIANAPOLIS, IND.

Ophthalmic Surgeon to the Indianapolis City Hospital and the City Dispensary; Consulting Oculist and Aurist to the Protestant Deaconess' Hospital; Ophthalmic Surgeon to the Eleanor Hospital for Children; Late Physician to the Indiana Institution for the Blind; Member of the Indiana State Medical Society, and of the Indianapolis Surgical Society, Indiana Academy of Science, American Society of Micros., Mississippi Valley Tri-State, and American Medical Associations, Etc.

Operative interference in cases of infective thrombosis of the lateral sinus, and sub-dural abscess, resulting from neglected mastoid disease, or as a complication in acute mastoiditis following intra-tympanic inflammation or traumatism, is a procedure no longer to be classed among the rarities in surgery, and yet it is of sufficient interest to justify the report of the following cases which occurred in the practice of the writer during the year: The vantage ground gained by recent researches, and the light thrown upon the subject by recent operative experiences, have opened up a field of interest here which is scarcely to be equalled in any other department of surgery. The dreadful nightmare of hemorrhage from the lateral sinus, the superstitious handwriting on the inner wall of the cerebral cavity, "*Noli me tangere*," however much it brought terror to the heart in other times, no longer disturbs the modern surgeon, but on the other hand, gives him additional interest as something new in scientific technique.

We can, many of us, remember how great a mistake it once was all but considered to be, to accidentally cut into the lateral sinus. The opening of so large a venous cavity—where all thought of ligation was out of the question—meant uncontrollable hemorrhage. The thought of purposely invading the intra-cranial lining of the sinus for the purpose of cleaning out a thrombic clot, or for exploratory reasons, even where ample evidence otherwise seemed to prove the presence of pus in this vicinity, was little less than surgical sacrilege, akin to wanton penetration into the inner temple of the Holy of Holies, where none but the high priest dared ever go. The evolution of the mastoid operation took time. The surgical technique, including the best antiseptic precautions, brought this operation

*Read before the Western Ophthalmologic and O o-Laryngologic Association at Chicago, Ill., April 8, 1898.

within a decade up to a high degree of perfection. Results were obtained, which had never been dreamed of before; and otology received an impulse, which lifted it out of the slough of despond. Ears were saved, and lives were saved which formerly had been abandoned as without hope.

Still the aurist was told that he must keep out of the cranium. He could go into the attic, but he must be careful not to fall over the hatchway down the back stairway into the cellar of the cerebral fossa; and above all things, must he not miss his way when he got into the antrum, and penetrate the sinus sigmoideus, that chamber of darkness, that Catacomb of Death. Here the aurist dare not enter; only the surgeon and seldom he. But the now perfected mastoidectomy, even with its tympanic communication, established under the best antiseptic measures, beneficial as that had proved to be, left more to be desired. Growing out of this fact, and further, as the journalistic literature in the early nineties, now and then gave reports of openings having occasionally been made into the sinus, sometimes unintentional, at other times by design, and where plugging had been reported, we find such writers as Hoffman[1], Lane[2], Parker[3], Macewen[4], Knapp and others, advocating a radical departure from timid methods and a more thorough and searching use of the chisel and trephine. In justification of the time honored, though forgotten injunction, "*That wherever there is pus it should be evacuated*," the inner table of the skull was to be removed, and even the brain itself was to be attacked, if necessary. Results have justified this innovation.

The writer begs leave to refer here thankfully to Dr. C. Bark[5], of St. Louis, for a reprint of his two cases, and for the valuable historical table which he gives, showing statistics of 124 cases done by various operators, with 84 per cent of recoveries, which may be considered as flattering indeed when we remember the fact that without operation in these 124 cases probably 100 would have died. Further mention is to be made of the writings of Dench[6], Hardie[7], Milligan[8], Alderton[9], and others which have added very materially to our stock of knowledge in this field during the past few years. The writer begs leave to report three cases; two operative, in which recovery took place, and one, where operation was refused, which resulted fatally, unfortunately no post-mortem was obtained in this case, but the diagnosis could scarcely have erred, and judging from other similar cases, it is to be reasonably surmised that however grave the symptoms, the best means of relief lay in an operation, involving both mastoid and cranium, in which event a more favorable out-

come of the case was to have been expected. Following are the cases:

Case I. Repeated Aural Abscess—Two Mastoid Operations, Followed by Necrosis over the Sigmoid Sinus—Third Operation Involving the Lateral Sinus—Complete Removal of the Tegmentum of Attic—Recovery—In this Case the Jugular was not Ligated.

Florence M., aged twelve years, of healthy parentage, somewhat illy nourished, and reduced in flesh and strength, was admitted to the Eleanor Hospital for Children, May, 1897. There was a large fluctuating tumor behind the left ear about the size of a pullet's egg. The auricle was displaced forward; the parts were exceedingly sensitive and tender from inflammation. Around the mass there was an extensive ring of induration; from the zygoma all around the auricle and down to the tip of the mastoid; some hardness in the stylo mastoid fossa; and an offensive fetid discharge from the ear. Drum membrane perforated, soft granulations protruding through the fairly large perforation. The ossiculæ were in place; membrane in front of malleus can be seen; is of a dull grayish dead color, but necrosis of membrane limited to the posterior inferior quadrant. Has had many "bealings" for about four or five years; resulted from cold and "earache."

Operation First.—About a year ago was operated on by a local surgeon of good repute. The nature of this operation it is not easy to determine; but from the description given by the mother, it was probably a mastoid operation. She states that the cutting was done behind the ear, and nothing was done to the canal or drum. The child at first improved after the operation, but later grew worse again, and for the last few weeks has suffered very greatly most of the time.

Operation Second.—Under general anæsthesia a free incision was made behind the auricle, extending the full length, from the tip of the mastoid around to the area above the external meatus. Extensive burroughing beneath the muscular tissue was found. An egg-shell full of thick greenish fetid pus was evacuated. The periosteum over the mastoid was found necrosed. An opening was readily made with the gouge, and by means of a curette a quantity of granular necrosis was scraped out.

The necrosis extended upward. Further scraping was done, and from the middle ear some granular necrosis was removed with small curette. A stream of water was passed through, the back wall of the antrum was cautiously scraped out and the whole cavity was then dried out and packed with iodoform gauze. The recovery was rapid

and uneventful. The case remained around the hospital a month or two and was regarded as well, when later in the summer, *August 15*, my attention was again called to the case by the nurse and a rapid engorgment and refilling of the locality with pus was reported. Great tenderness and swelling was now apparent all round the ear. There was no discharge. Temperature 101½°, much pain, restlessness and worry. A marked change in the disposition of the patient had been observed. She is pevish, morose, fussy. Has been so for some weeks. During the next few days from the above date there was periodical rise and fall of the temperature, intense headache, anorexia, marked changes in the character and disposition and some signs of delirium. A peculiar expression of terror and dread pallors the face.

Operation Third.—It was therefore deemed advisable to operate again. No positive signs of general sepsis having shown themselves, the ligation of the jugular was not deemed imperative. Upon reopening the antrum a new mass of granulation tissue was found and considerable necrosis of the external table discovered, which possibly had been overlooked before. There was necrosis at the bottom of the antrum, respectively the inner side next to the sigmoid sinus. While scraping and curetting, the instrument went through into the cranial cavity. A lifter was now inserted and by upward prizing, lever fashion, with the bony edge as a fulcrum, the necrotic bone was removed piecemeal clear around to the attic. Some excavation was made in the axis of the petrous portion of the temporal bone. The dura mater at the sinus was dark blue. It was opened. Some clots and ichorous sanguinolent fluid discharged. The lower body of the mastoid was preserved, as well as the outer wall of the meatus; but upward and around the meatus, much decayed periosteum and necrosis of the external table was removed to the attic which was again curretted. The whole wound was dried by wiping, after bichloride irrigation, packed with iodoform gauze and the bandage applied. The temperature that evening fell to normal. It remained with from 1° to 1½° variation for a few days, and an uneventful recovery followed. There is now some useful hearing in that ear. Watch, ten feet.

Case II. Aural Abscess—Perforation of Drum by Paracentesis—Cessation of Discharge—Relapse—Lateral Sinus Involvement.

W. S., age twenty-six, German, strong, athletic young man, was complaining of severe headache and aural pain. He was feverish and weak from suffering. His family history was good; both parents

living; no tubercle, no specific history. Was himself never sick until two months ago, when after an attack of influenza he had pains in the left ear, followed by discharge which kept up till about a week ago, when the discharge ceased. Had a chill Thursday and after that fever, accompanied with dizziness and tenderness around and behind ear. Bowels sluggish, tongue furred and dry. His voice indicates some nasal obstruction, but he does not complain of any nasal trouble; does not think he has ever had catarrh. Temperature $101^{3}/_{10}°$. Membrana flaccida tense, bulging, meatus swollen, induration fairly well pronounced around auricle. Ordered salines, leeches to anterior part of meatus and over mastoid; saline laxatives to be followed by bromides. The following day, although the leeching had resulted in ample local depletion, and saline had acted well, there was the characteristic temperature, which foreboded trouble, and much pain in and around the ear. Accordingly a paracentesis of the membrana tympani was made behind the malleus handle; this was followed by some bleeding and a discharge of pus, which, however, was not free. Hot applications and the internal administration of ergot and bromides were ordered. This condition of affairs continued for some days and the temperature, as indicated by the following table, rose every evening and fell every morning, varying from 100° to $103\frac{1}{2}°$, never becoming normal:

On the 18th, five days after the paracentesis of the membrana tympani, an operation on the mastoid was advised but refused by the friends of the patient. From this time on the symptoms became more and more pronounced; swelling in the neck and stylo-mastoid region indicating thrombosis, probably in the upper portion of the jugular or sinus. Transient delirium with excessive pain and tendency to refer the trouble to the occiput, led to the conclusion that either subdural abscess or sinus involvement was at the bottom. Hoping still each day to get an operation, the treatment was kept up; but, to my great astonishment, on the 26th the young man's parents had removed him from the hospital. Two days later I learned from the physician, into whose hands he had fallen, that he had died after deep coma, which had already set in when he arrived at his home. No post-mortem could be obtained, I regret to say.

Case III. Little Miss, aged thirteen years—Otitic Cerebral Abscess — Operation Mastoid — Removal Sinus Clot — Ligation Jugular—Recovery.

A fetid carious middle ear disturbance had existed six years; it supervened as sequela after scarlatina. Much treatment had been had without lasting results. January 20th, 1898, after a week's in-

disposition, malaise, anorexia and chill, seven days ago discharge ceased. This was followed by fever, swelling, pain and great tenderness in neck and ear. External auditory canal small, swollen and almost occluded. After syringing, removed with curette small polypoid granulations from bottom of canal and tympanum; necrosis; fetid sanguino-purulent discharge following operation on tympanum and canal; however no marked decrease in tumefaction and swelling of neck. Salines, leeches, followed by a supporting diet five or six days; great tenderness over mastoid; temperature 101° to 103½°. January 26th, vomiting, flighty; mother reports spasm during night. Tenderness in axilla; no positive abscess in this locality, yet lymphatics of neck hard and swollen; discharge from ear not satisfactory; no air through Eustachian tubes; fauces and nasal mucous membrane swollen; both tonsils large; wild uneasy look to patients countenance; pupils rather large. Ophthalmoscope shows optic papillage not complicated; some dread of light, and much headache.

Operation, January 28th.—Complete curettement of mastoid cells; much necrotic granular tissue removed; communication with attic established; but no flow of pus demonstrated, and it was deemed advisable to explore further. On account of the general indications of threatened sepsis it was deemed advisable to ligate the jugular. This was done by dissecting down along the anterior border of the sterno-cleido-mastoideus and between that and the lower border of the posterior belly of the digastric. After exposing the sheath and separating the vein, two ligatures were thrown around it, an inch apart, and the vessel severed between the ligatures. The lateral sinus was then exposed by chipping away the internal table with elevator and forceps. Aspiration with a needle; sanguinolent wheyish exudate. The sinus was then laid open freely, considerable more exudate and a thrombic clot evacuated. This was followed by some oozing of blood which at first appeared threatening, but with tamponing and drying out with cotton became less. The whole field of operation was then sterilized with dilute bichloride solution irrigation, followed by packing with iodoform gauze; tight roller bandage over all. This patient made a good recovery from the operation; the following day temperature 101°; after the third day normal. There were no subsequent unfavorable symptoms and the patient made an uneventful recovery. At the end of three months now the patient has remained well; there has been no further discharge. There is no improvement in the hearing, but that was probably lost before the last onset of the inflammation.

In summing up the considerations of this interesting subject the writer is of the opinion that a bolder and more radical surgery in the light of modern antiseptic measures is destined to replace the former timid conservatism, which has cost so many lives. The lateral sinus presents no greater difficulties to operative interference, than many other portions of the brain when occasion demands. It should be opened when a clot can be demonstrated with reasonable certainty to exist, and without hesitation when pus is known to be present. Ligation of the jugular should be done in certain cases not for the sake of facilitating the operation, but as a means of preventing at least one source of general infection and sepsis. Like every other valuable surgical procedure, it should be done in time to give the patient the benefit of its value. Procrastination adds to the dangers and diminishes proportionately the hopes for cure, which the operation offers.

REFERENCES.

1. Hoffman: Deutsch. Zeitsch. f. Chir., 1888, p. 484.
2. Lane: Trans. Chir. Society, 1889, p. 260.
3. Parker: Berlin. Klinische Wochenschr., 1892, p. 214.
4. Macewen: Pyogenic Diseases of Brain, etc., 1893.
5. Bark: Two Cases of Opening Lateral Sinus, with table; reprint, 1887.
6. Dench: Operations on Tympanum and Mastoid, Trans. Otol. Soc., Vol. iii, 1896.
7. Hardie: Annals Otology, 1896-7-8.
8. Milligan: Lancet, 1885, April 20, et sq.
9. Operative Otitic Lat. Sin. Phleb., Gaz. des Hop., Feb. 1897. Alderton.
10. Carotid Canal in re Prac. Otol., Monatsch. Ohren., 1897; Gruber.
11. Otitic Cer. Abscess, Randall, Univ. Med. Mag., Feb. 1897, Vol. v, p. 193.
12. Cerebral Dis. ex Otitis Med. Pulson, Ann. Otol, Vol. v, p. 229.
13. Extra Dural Abscess ex Mastoid Emp., Randall, Ann. Otol., Vol. v, p. 830.
14. Mastoid Antrotomy; Alderton, Ann. Otol., Vol. v, p. 832.
15. Labyrinth. Vertigo; Gelle, Trans. Alderton, Ann. Otol., Vol. v, p. 1183.
16. Mastoid Abscess et Lat. Sinus Thromb.; Wall, Ann. Otol., Vol. v, p. 604.
17. Mastoiditis without Mid. Ear Dis. etc.; Berens, Ann. Otol., Vol. vi, p. 239.
18. Mastoid Suppuration et Sinus Pyaem.; Robson Leeds, Hardie, Ann. Otol., Vol. vi, p. 195.
19. Cerebellar Abscess et Mastoid Dis.; Hardie, Ann. Otol., Vol. vi, p. 194.

NEW INSTRUMENTS.

FORCEPS FOR NASO-PHARYNGEAL ADENOIDS.

BY ST. CLAIR THOMSON, M.D., LONDON; F.R.C.S., ENGLAND.

Of the various modifications which have been effected in the shape of the post-nasal forceps, originally made by Löwenberg, I think the one designed by Jurasz has not met with the attention it deserves. In this form the extent of the cutting surface and the size of the

fenestræ allow of large portions of the growth being grasped, so that very few introductions of the instrument are required. I venture to think that in common with most forceps used in the removal of these growths those of Jurasz are unnecessarily large, long and heavy. In the pair which Messrs. Mayer and Meltzer have made for me, the instrument only weighs one ounce instead of three and a half ounces, and in a straight line it measures six inches instead of ten and a half inches. The hinge is of a different construction, allowing the instru-

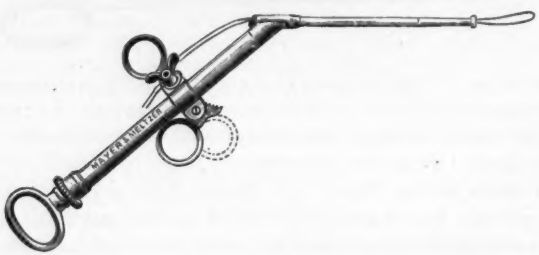
ment to be easily taken to pieces to be purified, and at the same time so arranged as to diminish any risk of the uvula being caught in the joint. The slighter build leaves more room for the index finger to be manipulated along with the forceps in the post-nasal space, while the shorter handles give more power. I have found this six-inch pair sufficiently large for patients up to sixteen years of age. The forceps have also been made with straight handles, as in Ruault's modifications, for those who may prefer this form.

Queen Anne street, London, W.

A NEW SNARE FOR NOSE, THROAT AND EAR WORK.

BY H. LAMBERT LACK, M.D., LONDON; F.R.C.S., ENG.

For many operations in the nose and throat a snare is needed which can be tightened up either rapidly or slowly. In many cases, as for the removal of certain forms of enlarged tonsils, inferior turbinate hypertrophies, fibrous growths, etc., it is of great importance to be able to draw the wire loop rapidly tight so as to grasp the growth firmly in position and then cut through it slowly. At the same time the snare must be strong enough, and must carry a wire sufficiently thick to cut through the growth, however tough it may be. I believe the snare here illustrated will be found to answer most of the above requirements. Its mechanism will be easily understood from the ac-



companying illustration. The wire loop is tightened at first by drawing on the finger loops, and then when a slow action or more force is required a screw action can be brought into play by releasing the lower finger loop. The instrument is very simple and strong in all its parts; it is made entirely of metal and can be taken to pieces for cleaning, etc. The wire loop can be quickly and easily attached and is very firmly fixed. The snare works noiselessly.

To increase the general usefulness of the instrument I have had it made with three ends, a strong barrel for very tough growths, a very fine end for aural use, for nasal polypi and other soft growths, and a curved end for use in the larynx and post-nasal space.

I am greatly indebted to an engineering friend, Mr. Bingham, for much help and for designing the method by which the screw is brought into action, and to Messrs. Mayer & Meltzer who have made the instrument for me.

Welbeck St., London, W.

TWO NEW INSTRUMENTS FOR APPLYING THERMAL TREATMENT TO THE MUCOUS MEMBRANE OF THE NOSE.

BY EMIL AMBERG, M.D., CHICAGO, ILL.

Former House Surgeon, Massachusetts Charitable Eye and Ear Infirmary, of Boston, Mass.

In the treatment of diseases of the nasal mucous membrane, our efforts have been directed, first, to coping with the disease itself, and secondly by direct stimulation of the tissues to cause a vigorous and healthy reaction. In carrying out these two factors a great variety of measures have been adopted. I should like to add to these methods a new one, a pure thermal treatment, applied by the aid of instruments constructed for the purpose.

Figures A and B show two new instruments for the thermal or thermal and medicinal treatment of the mucous membrane of the nose. The instrument represented by Fig. A is made up of a continuous hollow tube, bent upon itself at the apex, furnishing in this way a supplying and returning tube, the two being bound together, leaving a smooth surface.

FIG. A.

FIG. B.

The instrument represented by Fig. B is a flat, hollow tube, perforated on the upper side, to be used in applying heat in the form of steam, or to be attached to the nebulizer.

The first instrument (Fig. A), similar to a Leiter's coil, is to be used for applying warmth and cold, either dry or moist; the latter after the instrument has been covered with gauze.

The second instrument (Fig. B) is a modified tip for applying either dry, warm or cold air, or air mixed with the medicines in use.

So far the author has made the following observation in a case of ozæna: After the nasal cavity had been moistened with the borax spray, the instrument A was introduced into the lower nasal passage and kept there, at a temperature comfortable to the patient, for about ten minutes, keeping it, if possible, in contact with the crusts. When the instrument was taken out, the crusts were found firmly attached to it, having thus been easily removed from the nasal cavity.

The instruments were made by H. Pfau, Berlin.

EDITORIAL DEPARTMENT.

ORIGINAL ARTICLES for publication should be in the Editorial Office on the 5th of the month preceding date of publication.

ILLUSTRATIONS necessary to elucidate the text will be furnished, without expense to authors, when suitable ink drawings or photographs are furnished.

SUBSCRIPTION price, $2.00 per annum in advance. Foreign countries, within the Postal Union, $2.25.

CONTRIBUTORS to THE LARYNGOSCOPE who desire reprints will please communicate with the Shallcross-McCallum Printing Co., 419-421 N. Fourth St., St. Louis, Mo., U. S. A., stating the number they wish, at the same time that they forward their MSS. to the Editors.

COMMUNICATIONS and all drafts and money orders should be addressed to

THE LARYNGOSCOPE,
P. O. Box 787, St. Louis, Mo., U. S. A.

EDITORIAL.

WHAT IS THE BEST OPERATION FOR "ADENOIDS?"

The diligent reader of rhinological literature can hardly have failed to notice that for the removal of the masses of lymphoid tissue in the naso-pharynx, commonly termed "adenoids," very different operative procedures are advocated. Galvano-cautery, the cold snare, curettment, forceps, each has its supporters. Some operators seldom use an anæsthetic, others invariably do. The position of the patient is as various as the operative features, some surgeons preferring the sitting posture, others what might be termed the recumbent semi-prone, and others again to have the vertex dependent, etc.

The use of Gottstein's currette as the main dependence appears to prevail as against the use of cutting forceps, though many operators

combine their use. Dependence upon the curette alone appears to be irrational, and, in fact, has been deceptive in its results by reason of the structure of the lymphoid growths. The lymphoid portions of these are held together and attached to the vault by fibrous and vascular tissue, forming sessile pedicles and septa, a sort of placenta, varying very much in its extent and firmness. Now, when this fibrous tissue prevails and the growth is therefore termed "tough" and fibrous, it is not reasonable to expect that an instrument like Gottstein's forceps, which scrapes rather than cuts the growth, will thoroughly remove it. A small, strong, sharp forefinger nail, such as possessed by some surgeons, is eminently superior to Gottstein's instrument, especially in curetting out the narrow recesses on the wall of the space anterior to the Eustachian prominences and at the entrance of the choanæ; yet it is well known that the portions of fibrous pedicle and lymphoid tissue left after its use often lead to a return of the growth. These cannot be thoroughly removed by even a very strong finger nail, much less by a curette scraping over the surface. Some form of cutting forceps is necessary. Such forceps undoubtedly require more skill and care for their use than the curette, but then, skill, care and deliberation are far more necessary for the proper performance of the operation than is generally supposed.

With many operators "ignorance is bliss;" for, after a hasty operation with the curette, during which the phenomenal hemorrhage encourages them to believe they have been heroically thorough, they fail to explore the cavity a week or two after, and to discover that close to the choanæ a considerable mass yet blocks the way and nasal breathing is still obstructed.

Haste in operating is mainly due to the very free hemorrhage and its menace to respiration. Hence it appears wise to place the patient semi-prone with the head sufficiently dependent, and to proceed quickly, but without haste. This, of course, necessitates complete anæsthesia, and sufficiently profound to insure the quietness of the patient, say for from five to eight minutes, during which time the finger nail and curette can be rapidly used, to be followed by the proper cutting forceps guided along the left forefinger, which (surgeon on the right of the patient) hooks forward the soft palate and constantly touches the sharp edge of the vomer.

The only fairly practicable way of telling whether all the vegetations have been removed is by palpitation, and this must be carefully done, or otherwise portions will escape detection.

The above observations are in accord with the experience of many competent operators, and are believed to be in accordance with those

general surgical principles which insure safety and success, whereas the methods pursued by many operators are neither safe nor successful. There appears at present to be too much stress laid upon rapidity of operating and brief anæsthesia, and too little upon the difficulties and dangers attendant upon the complete removal of some of these growths.

No matter how complete the operation appears to have been, a careful examination of the naso-pharynx should invariably be made a week or two afterward. EATON.

ANNOUNCEMENT.

In compliance with numerous requests from our enthusiastic supporters, and in recognition of the progressive spirit which is making its presence felt in medical journalism, the editors of THE LARYNGOSCOPE have arranged, as previously announced, to direct more attention to the ABSTRACT DEPARTMENT of the journal.

We point with pride to the large and excellent series of original communications which have occupied our pages in the past, and we would also express our appreciation to the many representative writers and authorities in oto-laryngology who have given us their active literary support. Though THE LARYNGOSCOPE is the youngest journal of its class, yet we cannot refrain from expressing, with due modesty, that we have furnished our readers with more original communications during the past season than any of our contemporaries, devoted to oto-laryngology, in the world.

Our present efforts are directed to establish THE LARYNGOSCOPE as an INTERNATIONAL JOURNAL OF RECORD of the specialties which it represents.

The most recent step in this direction has been to arrange a complete BIBLIOGRAPHY and ABSTRACT DEPARTMENT, to include a resumé of the entire journal literature of otology, rhinology and laryngology. To this end our entire editorial staff has been actively interested, and the reader who will now carefully scan the pages of THE LARYNGOSCOPE from month to month, will find his time thoroughly occupied, for it will be our aim to include a mention of every oto-laryngological article contributed to the original columns of the medical journals of the world.

While many of our abstracts may be brief, those readers who may be interested in the details of some particular paper, will find accurate references facilitating further search.

We earnestly request authors of papers to give us early notice of any omissions in the publication of abstracts.

SOCIETY PROCEEDINGS.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON LARYNGOLOGY AND RHINOLOGY.

Stated Meeting, April 27, 1898.

Dr. Jonathan Wright, Chairman;
Dr. Thos. J. Harris, Secretary.

Tubercular Ulceration of Larynx, Naso-Pharynx and Tympanum.

Dr. Wendell C. Phillips presented a man, twenty-six years of age, a native of Japan, who had been referred to him by Dr. George R. Elliott, on March 24, 1898. He had had cough and some expectoration since October, 1897, but had lost very little flesh. He had been given creosote by the mouth, and applications of lactic acid had been made to the larynx. Two years previously he had what was supposed to be a chancroid. Examination showed an ulceration confined to the right side of the larynx, and not affecting the epiglottis. The marked characteristic of the ulceration was the almost total absence of infiltration. Deglutition was not painful, and there was only slight pain on phonation. An ulcer of moderate size was discovered in the vault of the pharynx, just posterior to the vomer, and extending to the fossa of Rosenmüller upon either side. About January 1, his right ear began to discharge, and had continued to do so. The otorrhœa came on without pain. There is extensive destruction of the membrana tympani. The physical examination of the lungs showed them to be normal except for slight consolidation at the left apex, with slight prolongation of expiration. There had been moderate night-sweats, but practically no emaciation or rise of temperature. The sputum contained a few tubercle bacilli. The patient had been taking creosote continuously since December, and for the past month gradually increasing doses of potassium iodide. At present he was taking twenty-five minims of the saturated solution, three times a day. He had also been given full doses of iron. The expectoration had been reduced one-half, and while the ulceration had not extended, there seemed to have been some increase in the infiltration. Mercurial inunctions had recently been begun, but so far with no definite result. Although apparently not improved, his general health had certainly not deteriorated. Dr. Phillips said that the appearance of the ulceration seemed to him more characteristic of syphilis than of tuberculosis. He had used no local treatment.

Dr. Wolff Freudenthal said that he felt quite confident that the ulceration in the larynx was specific, and that the ulcer in the naso-pharynx was of the same nature. He had seen quite a number of cases of tubercular ulceration of the latter region, and in these cases there had always been pain present. It was probable that in the case under discussion the man had acquired tuberculosis of the lungs afterward.

Dr. Phillips said that his patient had night-sweats, and a few tubercle bacilli had been found in his sputum, but this, in itself, did not necessarily prove the existence of pulmonary tuberculosis, and certainly the physical signs hardly justified such a diagnosis. He had made no applications to those ulcerations because he had inclined to the view that the disease was syphilitic.

Dr. Francis J. Quinlan said he had recently seen a case with well marked tumefaction of the arytenoids which exhibited the initial stage of tuberculosis. One side of the larynx was intact; on the other side there was a peculiar hypertrophy of the false cords, and in the center of these bands was a slight ulceration. There were very few subjective symptoms. The sputum had been examined with negative results. The patient was then presented.

A Device for Applying Vaseline to the Nose.

Dr. T. Passmore Berens exhibited a simple and original device for applying vaseline in its solid form to the nose. It consists of a T-tube with an attachment for screwing it onto the head of an ordinary vaseline tube. By squeezing the tube a little vaseline is pressed up into the T-tube, and then by suddenly compressing an ordinary rubber bulb attached to one limb of this T-tube the vaseline is projected into the nose with considerable force.

A Cyst of the Epiglottis.

Dr. Robert C. Myles exhibited two cysts which he had removed from the anterior surfaces of epiglottises. One was so large that the patient had had difficulty in swallowing and breathing. The removals were effected with the snare, with the object of removing them completely and so preventing recurrence.

Excessive Orbital Cellulitis Following an Operation for Nasal Polypi.

Dr. T. J. Harris presented a woman, about thirty years of age, who came to his service at the Manhattan Eye and Ear Hospital with the usual symptoms of nasal occlusion from polypi. He found that every time he removed a polyp it caused excruciating pain in the

frontal region. Accordingly, after about two weeks, he had determined to give a general anæsthetic and remove all the polyp tissue at one operation. It was found at the operation that the polypi involved all the sinuses, as far as could be discovered—certainly both ethmoidal sinuses were completely filled, and it extended into the sphenoidal sinus. With a cold snare he had endeavored to remove these first, and then, with the disinfected finger, he had explored the sphenoidal and ethmoidal sinuses. In the latter he felt polyp tissue and discovered that the thin cells of the ethmoid had been almost entirely broken down by the disease process. Great care was taken to carry on these manipulations gently, yet he easily reached posterior to the eyeball. After curetting anteriorly only in the true nasal space, he desisted from further operative measures. The next morning there was a cellulitis extending down onto the upper jaw, associated with the usual blackening. The patient complained of very severe pain in the region of the orbit, and the temperature was elevated. In addition to the cellulitis there was a marked exophthalmos. The ophthalmologists at the hospital were of the opinion that a clot had formed behind the eyeball and that a considerable time would be required for its absorption. After a week or ten days the pain had entirely ceased. Two or three days later the upper eyelid began to swell, and at the end of the third day fluctuation was detected. Under anæsthesia, he had found in the region of the lachrymal gland an abcess, and had evacuated considerable pus. On carrying a probe down he had felt it pass into the ethmoid bone. At the present time the extensive œdema of the upper eyelid was gone, and there was no longer any pain, but the wound had not yet healed. At no time had there been any involvement of the optic nerve, such as choked disk, and there had been no ecchymosis of the eyelid itself. Most of the pus was situated superficially, although the track extended presumably into the ethmoidal region.

Dr. J. Oscroft Tansley exhibited a patient upon whom he had operated three weeks before for a deviated septum.

Cyst of the Hard Palate and Right Nasal Fossa.

Dr. Robert C. Myles presented a patient who had had nasal stenosis on the right side for four or five years. The cyst measured about one and three-quarter inches in its horizontal and vertical diameters, and extended through the hard palate in a sort of channel. Evidently absorption of the bone had occurred in places. It was probably a dentigerous cyst, but it was different from other cysts of this kind that he had seen. Its walls were very tough, at least in the palatal region.

In answer to a question from Dr. Quinlan, Dr. Myles said that there was no specific history.

Dr. Jonathan Wright said he was reminded of an extraordinary case seen by him last summer. The patient was a man who had been treated in this city at one of the dispensaries, and had been told that he was liable to be choked to death at any time, and that if severe dyspnœa supervened he should apply to Dr. Wright. When first seen by the latter, the larynx was about four-fifths occluded by a cyst, which appeared to be about the size of a walnut. The dyspnœa was not very severe at the time. He wondered that nothing had been done to relieve the patient, but the physician who had seen the case had evidently looked upon the growth as malignant. The speaker said that he had sent the patient over to the Manhattan Eye and Ear Hospital, expecting that a hasty tracheotomy would be demanded. On his way to the hospital the patient suddenly felt something "give way in his throat," and experienced immediate relief. Examination at the hospital showed that the growth had shrunken and presented the typical appearance of an œdematous perichondritis, due to syphilis. The patient recovered rapidly and completely under the administration of the iodide. Dr. Wright said that he had never heard before of such a case.

Suppuration of the Antrum.

Dr. Jonathan Wright showed a case which had been operated upon about two years ago in England, through the alveolar fossa, for suppuration of the antrum. A dentist in London had put in an obturator, and the patient had been instructed to take it out twice a week and syringe out the antrum with peroxide of hydrogen. The apparatus inserted by the dentist was exhibited. It consisted of a hollow spiral spring, set into a vulcanite plate, and so constructed that when in the antrum it acted as a foreign body, and, as Dr. Wright said, was extremely well calculated to keep up suppuration in the antrum. When first seen by the speaker, the patient had fever and pain and a profuse purulent discharge from the nose. The opening was too minute to admit of drainage. He had accordingly done the supra-alveolar operation, and had followed his rule of making a very large opening. The inside of the antrum felt perfectly smooth to the finger at the time of the operation, and some bare bone was detected. The man did well for a week after operation, and then developed a quinsy sore throat, which had served to still further weaken him. The patient had been instructed to keep the packing in for three weeks. The discharge had ceased after two weeks.

The Treatment of Hoarseness in Singers and Public Speakers.

Dr. F. A. Bottome read a paper with this title. He said it was well understood that hoarseness is common to many pathological conditions, but it was assumed in this paper that the patient had been under the care of a qualified physician, who had already placed the upper air passages in a healthy condition. Notwithstanding such care singers do become hoarse, and in the treatment the promptness of relief is of great importance. Public singers are constantly exposed to sudden variations of temperature in going back and forth between the dressing room and the stage. In the early stage, he did not think local treatment was desirable. To relieve the congestion the patient should be given a hot mustard foot-bath and put to bed. After a dose of ten grains of calomel, aconite should be given up to the physiological effect, and a Leiter's cold coil should be applied externally. The throat may be sprayed with some soothing application, such as albolene. The patient must not utter a word, making his wants known by writing. After twenty-four hours or more of this treatment there should be a decided improvement. It was then proper to resort to the use of tonics. His personal preference was for the tincture of the chloride of iron, in doses of half a drachm in glycerine and water, administered after meals. It should be continued three times daily in increasing doses for a number of days. If the larynx is still generally congested, nitrate of silver (ten grains to the ounce) may be applied as a spray. There is frequently only a narrow line of congestion visible along the edges of the cord, and then a solution of menthol (one drachm to the ounce of albolene) should be applied to the cord with a probe. The patient is by this time usually so much better that he is anxious to try the voice. This should be done very gradually, in the middle register only, going up and down the scale. The patient should be infused with a large degree of hope, and given as much confidence as possible at the time regular singing is resumed. It is well to make a local application between the times of singing, or see to it that the body is well rubbed down with alcohol.

The sudden accumulation of mucus upon or between the vocal cords is a common cause of hoarseness or of a sudden "breaking" of the voice, even in singers apparently in excellent condition. The treatment consists of deep inhalations of menthol dissolved in albolene, using a globe inhaler, together with the use of the same solution in a hand atomizer by the patient just before singing or speaking, so as to prevent the dislodgement of the mucus from other parts and its deposition on the vocal cords at this time.

Temporary paralysis of the vocal cords occasionally takes place. He had seen two cases. One of these was a clergyman who had had a severe paroxysm of coughing during the night, lasting nearly an hour. Examination showed the cords to be in the cadaveric condition. The affection lasted for six weeks. The second case was a chorus girl in the opera. After an unusually long and severe rehearsal, while suffering from a cold, she found the voice had gone. There was no inflammation of the larynx, but adduction was impossible. Faradization and strychnia effected a cure.

The treatment of chronic conditions, or of hoarseness from a faulty use of the voice, was not considered to be within the scope of the paper, but an exception was made in the case of singer's nodules.

As the etiology of these nodules was becoming better understood, the proper line of treatment, Dr. Bottome said, was becoming clearer. These nodules originate from a faulty method of singing, particularly of tone-placing. Relief is afforded by systematic instruction in correct tone-placing.

Dr. Myles said that the paper was extremely practical, but it seemed to indicate that the author had been more successful or fortunate with chorus girls than he had been. Personally, he believed there was a large element of luck in this work, and he made this statement after having had a large experience in the local treatment of the throats of opera singers. In the acute cases the best results seemed to be obtained by an inhalation at a temperature of 140 to 160°F. of the vapor of a mixture of one teaspoonful of the compound tincture of benzoin in a pint of water. Such a soothing application seemed to him the best remedy for general use. In practice, it was rare that the voice could be rested sufficiently, except, perhaps, in the case of clergymen. If the physician insisted upon the singer stopping the use of the voice, it often meant the loss of a position, and, perhaps, even then the result might not be very satisfactory. He had noticed in highly educated opera singers, who frequently are troubled by alternating nasal stenosis, that there is a special tendency to the formation of singer's nodules. The cords are forced into peculiar positions, giving rise to the so-called "nodules." In these cases he never hesitated to apply nitric acid, which not infrequently yielded almost brilliant results in three days. When the nose had been placed in such a condition as to make this alternating stenosis of rare occurrence, the voice improved, and in the course of six or eight months, in chronic cases, the nodules would entirely disappear.

Dr. Quinlan said that in a paper read by him before this Section some time ago, he had dwelt very forcibly on "laryngeal strain."

We all knew that this condition is simply forcing the larynx to do a certain amount of overwork, and which usually resulted from a neglect to use the resonators of the upper passages, viz., nose and its accessory sinuses. As a result, there is compensatory thickening, and the slightest changes in the weather are followed by local swelling. This causes the singer to force his extresic muscles in order to produce the desired tones. This, in turn, increases the thickening, and, in time, results in a singer's node. An important feature in these cases is the condition of the epiglottis to the base of the tongue. It is sometimes held there by a mass of lymphoid tissue. Solis Cohen had beautifully described this as an "imprisonment." A certain pitch and volume of tone is the result of such imprisonment. In a person who is struggling against this condition of the lingual tonsil, the constant effort to move this hampered epiglottis causes undue strain, with congestion and hypertrophy of the parts. The false bands will be found swollen, and the patients talk only with effort. He had found that in many instances the applications that had been recommended did not accomplish what was desired. If one could reduce this mass and give freedom to this valve, one could take off the laryngeal strain. Rest and constitutional measures would greatly assist. He was always opposed to irritation, for it seemed to him to be one of the preliminaries of congestion. It was better to produce profuse sweating and catharsis. Applications must be made to this gland as well as to the nares, pharynx and laryngo-pharyngeal space. Physicians seemed inclined to overlook this very important feature of the condition under discussion. He recalled the case of a man who had had a large hæmatoma on the cord, which had existed for some time. He was still endeavoring to keep up his singing in opera, and at the termination of each performance was, in consequence, almost exhausted. The excision of this mass was advised, but the patient feared to submit. Nevertheless it disappeared without surgical interference by attention in keeping open the nasal chambers.

Dr. Beaman Douglas said that it had always been a matter of remark with him that there was such very slight congesting of the cord itself, and apparently no adequate cause for the hoarseness in these singers. He had, therefore, tried, in a series of cases of acute laryngitis, in both hospital and private practice, a variety of remedies. The usual ones, such as tartar emetic, aconite and Dover's powder, quinine and belladonna, had uniformly disappointed him. He had now come to believe that the most important thing was to secure an even temperature and absolute rest in bed for twenty-four hours, together

with employment of massage, three times a day. The patient should also be kept on a liquid diet. This treatment had been found more reliable than any other he had tried. He had often been struck with the fact that, while the cords did not appear reddened, they were œdematous along the free border, and that the mucous membrane covering the arytenoids was somewhat acutely inflamed. His treatment had been directed particularly to the congestion of the arytenoids. He did not hesitate to employ astringents, using cocaine previously. Enough cocaine would dribble over the arytenoids on to the cords to contract them. A four per cent solution of cocaine seemed to do them good, if applied to the arytenoid region. Subsequently, a two-grain solution of chloride of zinc, or a five-grain solution of nitrate of silver was appropriate. He was accustomed to forbid the use of the voice, substituting for it, as far as possible, the whispered voice. He had not had any uniform success with the oily sprays; on the other hand, some tarry preparations seemed to be serviceable. Where mucus collects on the cord, the vaporization of tar seemed to give relief. In singers of the opera chorus class it was always well to regulate and restrict the diet.

Dr. Bottome, in closing the discussion, said that he had limited his paper to those cases in which the nasal passages had already been placed in good condition. He had purposely omitted reference to the inhalation of steam because of the exposure to which these patients are subject, and he thought a singer who took a leading part could always rest for twenty-four hours and allow his part to be taken by an understudy. In an otitis media the drum-head would be found acutely congested, and in these cases his experience had been that the ear should be left severely alone, and that every effort should bemade by catharsis, aconite and mustard foot-baths to determine the blood to other parts of the body. It seemed to him that the same was true of these cases of acute laryngitis. Patients who are to go on a draughty stage within twenty-four or forty-eight hours should not be given inhalations of steam. It was for this reason that he recommended a tonic treatment. He preferred very large doses of iron and believed experience justified their use. The chorus girls do not have understudies, but if they are good looking they can often go on the stage and make their lips move without singing—"fake it," as they call it—until the hoarseness is recovered from. Many singers would say, on coming to the physician, that they did not wish nitrate of silver used upon them—they have a prejudice against it. He did not mean to say that this was justifiable, for in some cases it was indicated; yet many of these cases, with a rather strong solution

of menthol (one drachm to the ounce, used as a spray to the larynx) experienced a great deal of relief. These patients were especially liable to be discouraged, and hence the importance of infusing into them a great deal of courage.

Foreign Resolutions of Sympathy on the Death of Dr. Joseph O'Dwyer.

A communication was read to the Section from Dr. George M. Lefferts, enclosing resolutions of sympathy from the Laryngological Society of Berlin, on the death of Dr. O'Dwyer. The communication stated, in brief, that the society desired to express to their American colleagues, through Dr. Lefferts, their profound regret at the heavy loss which their art had sustained through the untimely death of Dr. O'Dwyer. At the unanimous adoption of the resolution the members of the Berlin Society arose from their seats in silent honor of the dead.

On motion of Dr. H. B. Douglas, the secretary was instructed to acknowledge the receipt of the communication, and to convey to the Berlin Laryngological Society the thanks of the Section, and their appreciation of the expressions of sympathy regarding the death of Dr. O'Dwyer.

An International Directory of Laryngologists and Otologists.

A Directory of above title is announced for publication in June, 1898, under the auspices of *The Journal of Laryngology*. The managing sub-editor will be glad to receive the names and addresses of all physicians limiting their practice to Laryngology, Rhinology and Otology.

Address all communications to Dr. Richard Lake, care of Rebman & Co., 11 Adam street, London, W. C., England.

BOOK REVIEW.

Text-Book of Otology—By Dr. L. Jacobson. Second revised German edition. In one octavo volume of 520 pages, 330 illustrations, 19 full-page plates. George Thieme, Leipzig, publisher. American agents, Lemcke & Buechner, New York.

The plan and arrangement of this volume is very similar to that of American text-books. This second edition shows careful revision, and each subject has been brought up to date. The therapy of otology receives more consideration than in most of the Continental works. Prominent points are emphasized by heavy-faced type and sub-headings throughout the volume.

A series of twenty clean, clear lithograph plates, profusely illustrating otological instruments, their technique, the topographical anatomy of the ear, many original sections of the temporal bone, and an interesting series of pathological pictures.

Die Syphilis der Oberen Luftwege unter Besonderer Berueckslichtigung der Differentiellen Diagnose und der Lokalen Therapie. By Anton Lieven. Aix-la-Chapelle. Part I. Syphilis of the Nose. Hang's Klinische Vortræge, Vol. xx., No. 10. Published by Gustav Fisher, Jena, 1898. American agents, Lemcke & Buechner, New York.

The above contribution is No. 20, Vol. II, of Hang's Klinische Vortræge. The author, Dr. Anton Lieven, is recognized as one of the highest Continental authorities on Syphilis of the Upper Respiratory Tract. The essentials of this article are contained in a contribution by Dr. Lieven in a similar paper published in the May, 1898, issue of THE LARYNGOSCOPE.

Klinik der Krankheiten der Mundhoehle, Kiefer und Nase. Von Dr. Med. L. Brandt. No. 1. Defecte und Phosphornekrose. Hirschwald, Berlin. American agents, Lemcke & Buechner, 812 Broadway, New York.

The greater portion of this brochure is devoted to the consideration of congenital deformities of the palate and adjacent structures. A detailed description of the various operative procedures for the relief of these conditions follows. Stress is laid on the after-treatment by massage and oral training.

In another chapter the author describes deformities of the jaws, accompanied by illustrations and descriptions of appliances for correcting these conditions.

The third chapter contains an interesting sketch of nasal deformities, particularly referable to constitutional diseases. Space is also devoted to the methods of making and applying artificial noses.

In the last chapter the question of phosphorus necrosis is considered.

Sounds and Their Relations.—A Complete Manual of Universal Alphabetics, illustrated by means of Visible Speech. By Alex. Melville Bell, F. E. I. S. Published under the auspices of the Volta Bureau, Washington, D. C. Quarto, cloth, $2 00.

The Science of Speech—By Alex. Melville Bell. Published under the auspices of the Volta Bureau, Washington, D. C., 1897. Price, 50 cents.

The Faults of Speech.—By Alex. Melville Bell. (Fourth edition.) 1898. Volta Bureau, Washington, D. C. Price, 60 cents.

An interesting series by this eminent authority, particularly applicable in the advanced methods of teaching the deaf. These small volumes are of much interest to special workers who come in contact with patients of defective speech and the deaf. The principles of vowel and consonant formation are here very ably set forth.

Annual and Analytical Cyclopedia of Practical Medicine. By Charles E. de M. Sajous, M. D., and One Hundred Associate Editors. Volume I. Philadelphia, New York, Chicago. The F. A. Davis Company, publishers, 1898.

A single glance at the array of prominent associates under the able editorial direction of Dr. Sajous, is a sufficient guarantee of the favorable reception which this new Cyclopedia of Medicine will receive. The first volume is a beautiful creation of the printers' and binders' art, and the contents are arranged similar to the monthly journal so long and successfully conducted by the same editor.

The cyclopedia will consist of six volumes, to be issued during a period of three years. In addition to this a monthly supplement will be published in regular journal form. In short, this will be a Cyclopedia of Medicine kept constantly up to date.

Pneumonia Following La Grippe.

BY M. E. CHARTIER,

Docteur en Medecine de la Faculte de Medecine de Paris, Membre Correspondant etranger de la Grande Encyclopedie, Section de Philologie.

As a rule certain diseases prove more fatal, not only in given districts, but during certain periods of time, along particular areas of territory. We have La Grippe, decreasing in intensity for the present; it has been replaced by pneumonia, which is not only raging in the United States, but in European countries. The bacteriologists will have to explain this fact; the truth remains however, that the mortality from pneumonia in its various forms is now far in excess of any previous record.

Twenty years ago, and preceding the re-appearance of La Grippe in its epidemic form, pneumonia proved as dangerous as it does at the present time. Many cases fell under my personal observation, and I must admit that my Parisian confreres were at a loss, not for a remedy for the disease alone, but even for a logical line of treatment. Dujardin-Beaumetz became so skeptical that he prescribed stimulants, regardless of therapeutical conditions. The mortality in his ward at the Hotel Dieu proved that his patients fared no worse than the others submitted to the antiphlogistic remedies then en vogue.

At that time, I advocated in my treatise on therapy, the administration of sulphate of codeine in two to five centigrammes doses—one-fourth to one-half grain. Codeine is the only remedy known to me possessing a marked and distinct effect upon the hypersecretions of the bronchial mucous membrane. What I then wished was an analgesic possessing antipyretic properties, which I could safely use. This I have since found in antikamnia and I believe it can be exhibited safely, especially on account of its not having a depressing effect on the cardiac system.

Experimental doses of from one-half to one gramme—seven to fifteen grains—of antikamnia administered under ordinary conditions did not develop any untoward after-effect. The following trace, taken with the sphygmograph was made ten minutes after the administration of one gramme—fifteen grains—of antikamnia.

Pulse, 112. Temp., 101 1-5 Fahr.

The above trace shows plainly that unlike other coal-tar products, antikamnia has a stimulating effect upon the circulation. In this particular case the temperature was sensibly reduced—102° to 101 1-5°. The analgesic effect of the drug was satisfactory.

My conclusion is that in the treatment of pneumonia, antikamnia is indicated as a necessary adjunct to codeine, on account of its analgesic and antipyretic properties and particularly because it acts as a tonic upon the nerve centres. The tablets of antikamnia and codeine containing four and three-quarter grains antikamnia and one-fourth grain sulphate of codeine, to my mind, present these two remedies in the most desirable form. I also find one tablet every hour, allowed to dissolve slowly in the mouth, almost a specific for the irritating cough so often met with in these complications. For general internal medication, it is always best to crush the tablets before administration.

HYDROZONE (30 volumes preserved aqueous solution of H_2O_2)

IS THE MOST POWERFUL ANTISEPTIC AND PUS DESTROYER.
HARMLESS STIMULANT TO HEALTHY GRANULATIONS.

GLYCOZONE (C. P. Glycerine combined with Ozone)

IS THE MOST POWERFUL HEALING AGENT KNOWN.

THESE REMEDIES CURE ALL DISEASES CAUSED BY GERMS.

Successfully used in the treatment of Chronic and Acute Ulcers (Specific or not),
SKIN DISEASES, ECZEMA, PSORIASIS, SALT RHEUM, ITCH, BARBER'S ITCH, POISONING IVY, ACNE, Etc.

Hydrozone, applied to any open diseased surface, destroys the pus, leaving the tissues beneath in a healthy condition. Then **Glycozone**, being applied to the clean surface, stimulates healthy granulations and heals the sore.

Inflammatory and Purulent Diseases of the Ear. Otitis Media, Etc.
By means of a glass syringe, inject **Hydrozone**, either full strength or diluted, and complete the dressing with a small roll of cotton well impregnated with **Glycozone.**

Send for free 240-page book "Treatment of Diseases caused by Germs," containing reprints of 120 scientific articles by leading contributors to medical literature.
Physicians remitting 50 cents will receive one complimentary sample of each, "Hydrozone" and "Glycozone" by express, charges prepaid.

Hydrozone is put up only in extra small, small, medium and large size bottles bearing a red label, white letters, gold and blue border with my signature.

Glycozone is put up only in 4-oz., 8-oz. and 16-oz. bottles bearing a yellow label, white and black letters, red and blue border with my signature.

Marchand's Eye Balsam cures all inflammatory and contagious diseases of the eyes.

PREPARED ONLY BY

Charles Marchand

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris" (France).

Charles Marchand, 28 Prince St., New York.

Sold by leading Druggists. Avoid imitations. Mention this Publication.

ODORLESS.

The Acknowledged Ideal Substitute for Iodoform.

Nosophen

C_6H_4 — C — $C_6H_2I_2OH$, $C_6H_2I_2OH$; CO—O

A NEW ANTISEPTIC IODINE COMPOUND.

TASTELESS.

POWERFUL ANTISEPTIC. ABSOLUTELY HARMLESS. NON-IRRITATING.

Employed by leading Specialists in diseases of the Ear, Nose and Throat, in all cases where Iodoform is indicated, and with far superior results.

SODIUM SALT OF NOSOPHEN (Antinosine)—Soluble.

Used in solution for antiseptic irrigations.
Powerful germicide, but absolutely harmless and non-irritating.

LITERATURE ON APPLICATION.

Sole Agents for the United States and Canada:

STALLMAN & FULTON, 10 Gold Street, NEW YORK.

PUBLISHERS' DEPARTMENT.

For Sale or Exchange.

"Knapp's Archives of Otology," volumes eight to twenty-four, inclusive. Address Cassius D. Wescott, 31 Washington street, Chicago, Ill.

Treatment of Burns.

The most exquisitely painful burns are assuaged in a few moments by an application of cocainized campho-phénique, after the following formula:

℞.—Cocaine hydrochlorate ..... 5 grains.
Campho-phénique ..... ½ ounce.
Olive oil ..... ½ ounce.
M.

Rub up the cocaine and campho-phénique and add the olive oil. A man whose hand had been torn and badly burned by an electrical discharge, the pain of which was so severe that he fainted twice before the dressing could be applied, expressed himself as absolutely without pain in less than one minute after the application.

Pneumonia and Irregular Action of the Heart.

C. B. Mathews, Kent, Ind., writes: "I take pleasure in offering my testimony to the great value of cactina pillets, in cases of weak and irregular action of the heart. I have used them for four years and have never been disappointed in them. They not only stimulate the heart, but improve that organ permanently. I find them very useful in all cases of typhoid fever and pneumonia."

Obstinate Constipation.

"I used chionia, a teaspoonful three times a day and at bedtimes, in a case of long standing obstinate constipation. The first three nights I directed a hot water enema to be given every night. This treatment brought about regular and spontaneous evacuations and resulted in a complete cure." E. T. Bainbridge, M.D.

Lickton, Tenn.

Kryofine.

A new analgesic of the coal-tar series similar to phenacetine chemically but more powerful in its action. Dr. Bischler, the discoverer, noted that phenacetine (acet-p-phenetidin) saponifies with an alkali or with muriatic acid only to a slight extent (10 per cent), whereas 60 per cent of kryofine (methoxacet-p-phenetidin) is thus changed. As just such modification must occur in the stomach and intestines before these products are absorbed and rendered available, theoretically kryofine should produce a more marked result than phenacetine.

Kryofine in small dose (about one-half) acts as powerfully, both as an analgesic and as an antipyretic, as phenacetine. (*Eichhorst, Zurich.*) The effects of the drug appear in a remarkably short time and without any objectionable collateral symptoms. The radial pulse increases in strength under its influence, as shown by disappearance of dicrotism, and alteration of blood pressure observed with sphygmograph and sphygmometer. There is no effect on the kidneys.

Index to Advertisements.

SYR. HYPOPHOS. CO., FELLOWS

Contains the Essential Elements of the Animal Organization—Potash and Lime;

The Oxidising Agents—Iron and Manganese;

The Tonics—Quinine and Strychnine;

And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a **Slightly Alkaline Reaction.**

It Differs in its Effects from all Analogous Preparations; and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, ***finds that no two of them are identical,*** and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, ***in the property of retaining the strychnine in solution,*** and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. ***Fellows.***"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to:

Mr. FELLOWS, 48 Vesey Street, New York.